

UNIT TWO

ENHANCING THE USE OF SOFTWARE

2.1 Using Application Software

2.1 Using Application Software

- **Software** refers to the operating instructions and applications that allow computers to process the numbers, pictures, sounds and text we enter into them.
- **Application software** is the software i.e. designed to satisfy a particular need of a particular environment.
- Some examples of application software are:
 - i. Word Processing Software
 - ii. Presentation Software
 - iii. Spreadsheet Software
 - iv. Desktop Publishing Software
 - v. Database Management Software

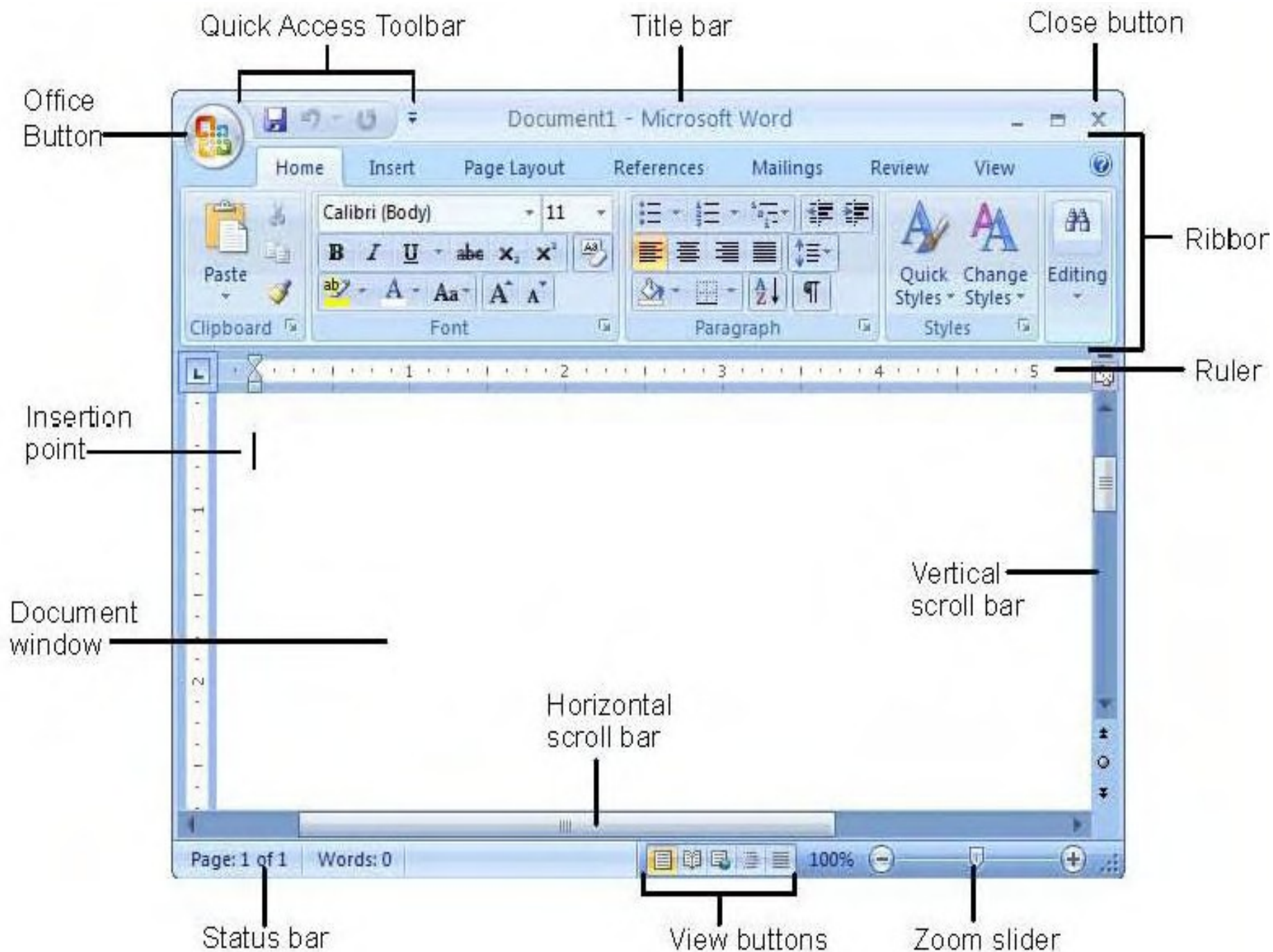
Word Processing

- The well known word processing programs are Microsoft word, Writer, WordPad, Text Editor and Star Word.
- Ms- Word 2007 is the famous word processing program that enables to produce a variety of electronic documents such as memos, letters, reports, research papers, brochures, announcements, newsletters, envelops, labels & so on by input device..

To Start Ms -word 2007/ to create a document

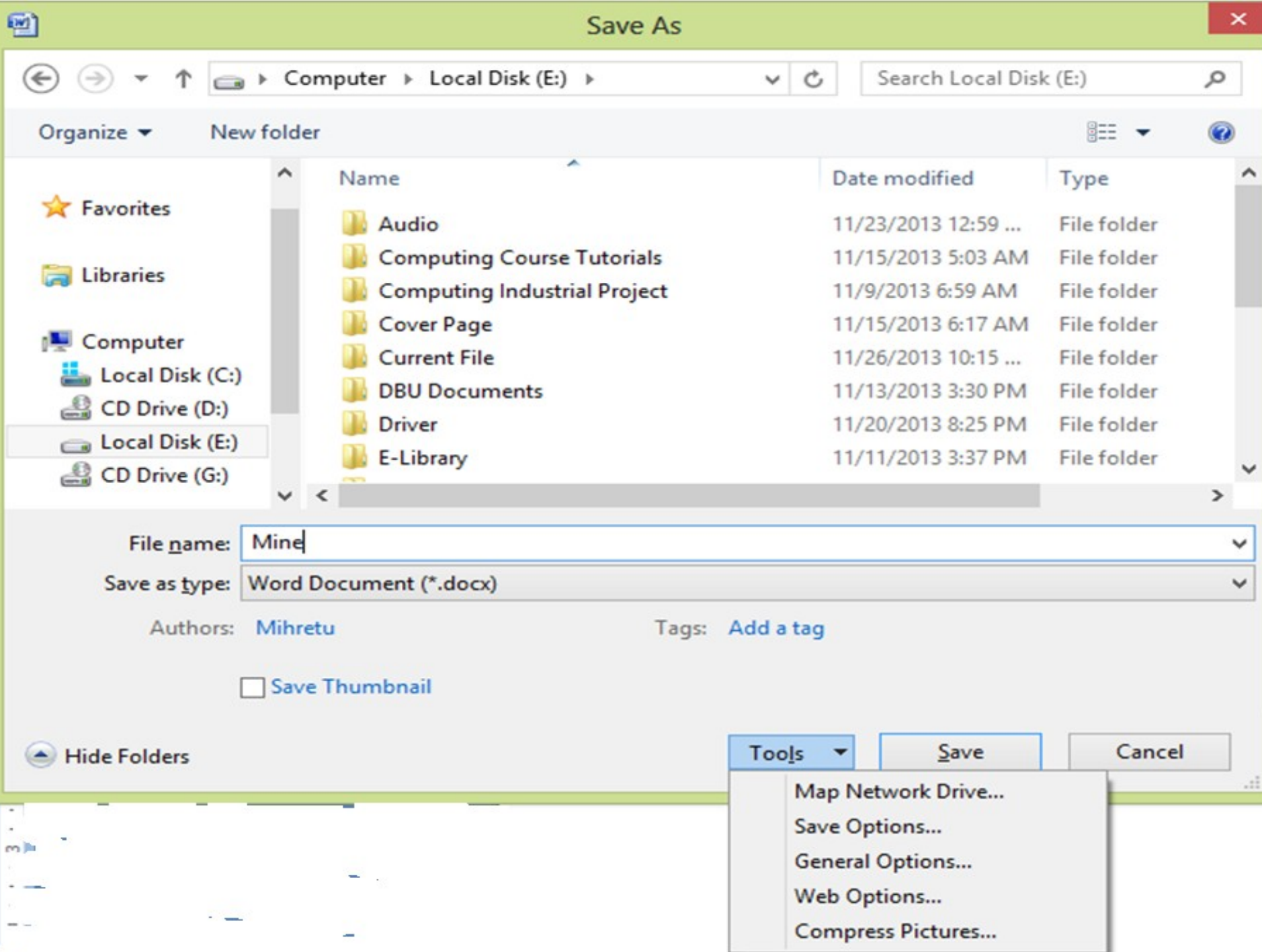
1. Click Start □ All Programs □ Microsoft Office □ Microsoft Office Word 2007
2. If Microsoft Office Word 2007 is **Pinned to Start Menu**, we can follow only the following steps:
Click Start □ Microsoft Office Word 2007
3. If you have not get Microsoft Office Word 2007 in All Programs, you should search it or follow the following steps:
Click Start □ Run □ Type the keyword 'WINWORD' □ click OK

N.B: A newly created blank document is named as *Document1*.



Saving a document

- If a computers have certain documents to have restricted access, a password can be assigned to them.
- Be careful, as without the password, access to the document will not be allowed.
- Make sure to use a password that will not be forgotten.
- Select **Save As | Tools | General Options**.
- Enter a password as required.
- *Note: Passwords are case sensitive.*



General Options Dialog box

General Options



General Options

File encryption options for this document

Password to open:

File sharing options for this document

Password to modify:

☐ Read-only recommended

Protect Document...

Macro security

Adjust the security level for opening files that might contain macro viruses and specify the names of trusted macro developers.

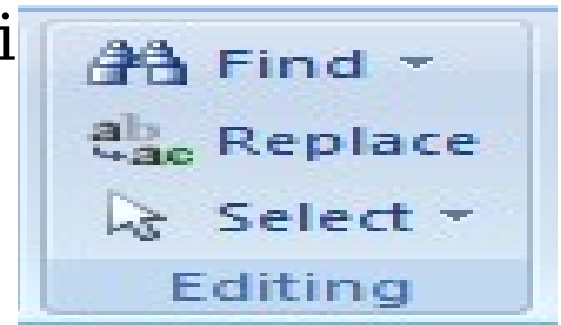
Macro Security...

OK

Cancel

Editing and Formatting Documents

- Editing includes:
 - Inserting text by pressing the required letter or symbol key from keyboard,
 - Deleting text by pressing *Backspace* key or *Delete* key,
 - Using **Find & Replace buttons** to open Find & Replace Dialog box from **Editing** group of **Home** **tab**.
 - Using **Undo & Redo buttons** on the **Quick Access Toolbar**.
 - Using **Spelling & Grammar button** to open Spelling & Grammar Checking Di**ab**.



Spelling & Grammar Research Thesaurus Translate Proofing

New Comment Comments

Track Changes Balloons

Final Show Markup Reviewing Pane Tracking

Accept Reject Previous Next Changes

Compare Protect Document Protect



I lik all our students.

Spelling and Grammar: English (United States)

Not in Dictionary:

I lik all our students.

Suggestions:

- like
- ilk
- lick
- link
- lid
- lip

☒ Check grammar

Options... Undo

Ignore Once Ignore All Add to Dictionary

Change Change All AutoCorrect

Cancel

- Formatting is the process of hanging the Appearance of our document. Formatting can be done at different levels. We can categorize formatting in to three.

1. Character formatting
2. Paragraph formatting &
3. Page formatting

- **Character Formatting** is applied on a given character, group of words & sentences. You can format your document to Bold, Italic, underline and also you can change font size, font style and font color.
- **Paragraph Formatting** determines the appearance and orientation of the edge of the paragraph and adjust the spacing between the line and also the spacing before or after the paragraph.
- **Page formatting** includes adjusting page margin

- Formatting can include tasks as :-
 - Changing the **Font** such as making bold, changing font size, color & type, using change case and character spacing by clicking *Font dialog box launcher* or by pressing **Ctrl + D**.
 - Aligning & indenting text,
 - Changing line paragraph spacing
 - Inserting elements such as bulleted, numbered & multi-level lists, borders, etc.
 - Inserting tables, pictures, symbols, illustrations, links, WordArt, Drop Cap, Header & Footer pages etc from **Insert**

Using
**paragraph
 dialog box
 launcher** or
 various buttons
 from
**Paragraph
 Group** in
Home tab.



Home

Insert

Page Layout

References

Mailings

Review

View

Add-Ins



Cut



Copy

Paste

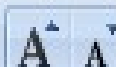


Format Painter

Clipboard

Calibri (Body)

21



B

I

U

~~abc~~

x_2

x^2

Aa

ab

A

Font



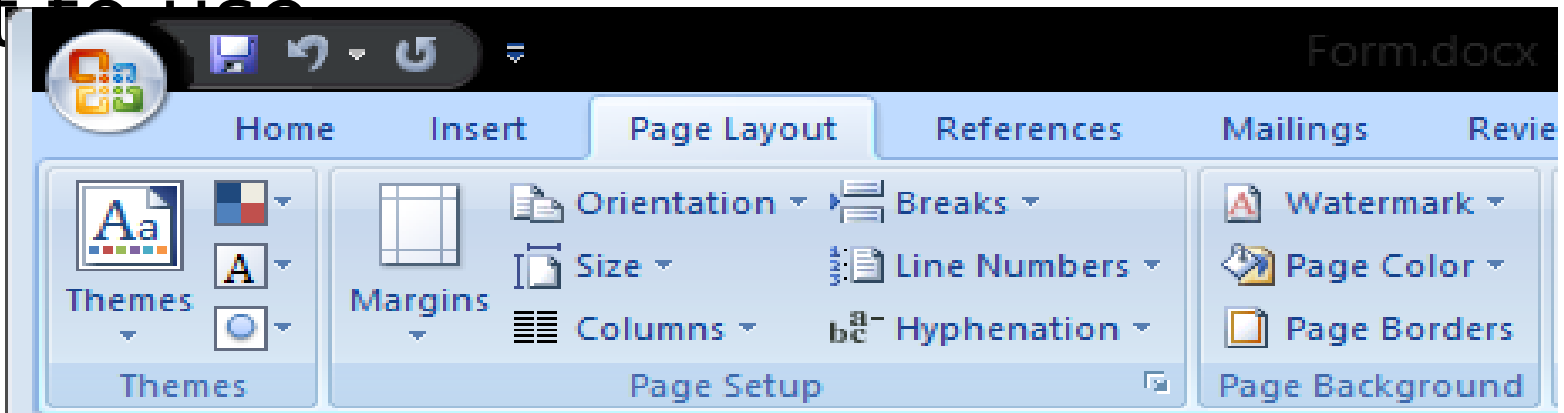
Paragraph

Section Breaks

- Sections are independent parts of the text that can be formatted independently.
- Section breaks are used to create sections within your Ms-Word document.
- To see section breaks we should turn on/off (show/hide) non-printing characters by clicking **button** of **Paragraph group** under **Home tab** or by pressing CTRL + SHIFT + 8 keys from keyboard.
- There is **no keyboard shortcut** to insert a section break.
- Section breaks are very helpful when creating books or reports.
- For each section, we can specify formatting, such as header & footer appearance, sequence of page numbers, page orientation (portrait or landscape) and page margins.

To Insert section breaks

- Open a word document
- Place the cursor where you want the section break.
- On the **Page Layout** tab, in the **Page Setup** group, click **Breaks** button.
- Click the type of section break that you want to use.



- **There are 4 Types of section breaks.**

- 1. Next Page** inserts a section break and starts the new section on the next page. Useful for starting new chapters in a document.
- 2. Continuous** inserts a section break and starts the new section on the same page. Useful when we want to have d/t formatting on one page, such as a different number of columns.
- 3. Even Page** inserts a section break and starts the new section on the next even-numbered page. If you want document chapters *always begin* on an even page, use this one.
- 4. Odd Page** inserts a section break and starts the new section on the next odd-numbered page. If you want document chapters *always begin* on an odd page, use this one.

- The *most used* is *Next Page*

Home

Insert

Page Layout

References

Mailings

Review

View

A



Themes



Margins



Orientation ▾



Size ▾



Columns ▾

Page Setup

Breaks ▾

Watermark ▾

Indent

Page Breaks**Page**

Mark the point at which one page ends and the next page begins.

**Column**

Indicate that the text following the column break will begin in the next column.

**Text Wrapping**

Separate text around objects on web pages, such as caption text from body text.

Section Breaks**Next Page**

Insert a section break and start the new section on the next page.

**Continuous**

Insert a section break and start the new section on the same page.

**Even Page**

Insert a section break and start the new section on the next even-numbered page.

**Odd Page**

Insert a section break and start the new section on the next odd-numbered page.

1. eU

2. ÉT

To Delete a section break

- When you delete a section break, you also delete the section formatting for the text before the break. That text becomes part of the following section, and it assumes the formatting of that section.
- Click **Draft** view so that you can see the double dotted line section break.
- Select the section break that you want to delete. Press DELETE.

Mail merge

- We use mail merge when we want to create a set of documents, such as a birthday invitation i.e. sent to many friends & relatives or a sheet of address labels.
- Each letter/label has the same kind of information, yet the content is unique.

To mail merge in word 2007, perform the following steps:

1. On the **Mailings** tab, in the **Start Mail Merge** group, click **Start Mail Merge**. Then select type of document you would like to create.
2. On the **Mailings** tab, in the **Start Mail Merge** group, click **Select Recipients** to add receipts to the mailing. Then select one from the given options for e.g. Type New List.
3. In the **New Address List** dialog box, type the information for the first address. If you want to add or remove columns, click **Customize Columns** button and then make the changes that you want. When your new list is complete, click **OK**. In the **Save Address** List dialog box, type a name for your new list, and then click **Save**.

4. To insert a field to your document, click **Insert Merge Field** from **Write & Insert Fields** group on the **Mailings** tab. Then select the field you would like to insert.
5. To preview the letters, Click **Preview Results** in the **Preview Results** group of the **Mailings** tab. Use arrows to navigate through the letters.
6. To edit recipients from the list, click **Edit Recipient List** in the **Start Mail Merge** group on the **Mailings** tab.
7. To finalize your documents by completing the merge click **Finish & Merge** in the **Finish** group on the **Mailings** tab and then click **Edit Individual Documents** from drop down list.
8. At the *Merge to New Document* dialog box, click OK button. The letters are merged with the records & displayed in a new document.

Header & Footer

- Headers and footers are areas in the top, bottom, and side margins of each page in a document.
- You can insert or change text or graphics in headers and footers.
- For example, you can add page numbers, the time and date, a company logo, the document title or file name, or the author's name.
- You can also specify different headers and/or footers for first page & rest of the document.

To insert Header & Footer in word 2007, perform the following steps:

- Open an existing Word document or Create new.
- On the **Insert** tab, in the **Header & Footer** group, click **Header** or **Footer**.
- Click the header or footer design that you want.
- To exit Header or Footer, Click the ***Close Header & Footer*** button in **Close** group in **Design** tab or double-click in body of document.
- Save the document.
- You can edit the header or footer by clicking the Insert tab, clicking the **Header** or **Footer** button in the **Header & Footer** group and then Clicking *Edit Header* or *Edit Footer* at the drop-down list.

Presentation Software

- Presentation is the process of presenting a topic to an audience.
- PowerPoint is the most widely used presentation software.
- Presentation software such as MS-PowerPoint 2007 allows users to create slide shows that can be viewed on the computer or projected onto a large screen.
- The shows can include clipart, graphs & charts, photos, drawings, video clips, sound & text.
- The slide transition effects provide the attention-getting movement those appeals to sales people and teachers.

Preparing a Presentation

- You can prepare a presentation by a template provided by PowerPoint or create your own presentation.
- Preparing a presentation consists of general steps such as
 - creating & editing slides;
 - Adding enhancements to slides; and
 - Saving, running, previewing, printing & closing a presentation.

To start PowerPoint 2007

1. Click Start → All Programs → Microsoft Office → Microsoft Office PowerPoint 2007
2. If Microsoft Office PowerPoint 2007 is **Pinned to Start Menu**, we can follow only the following steps:

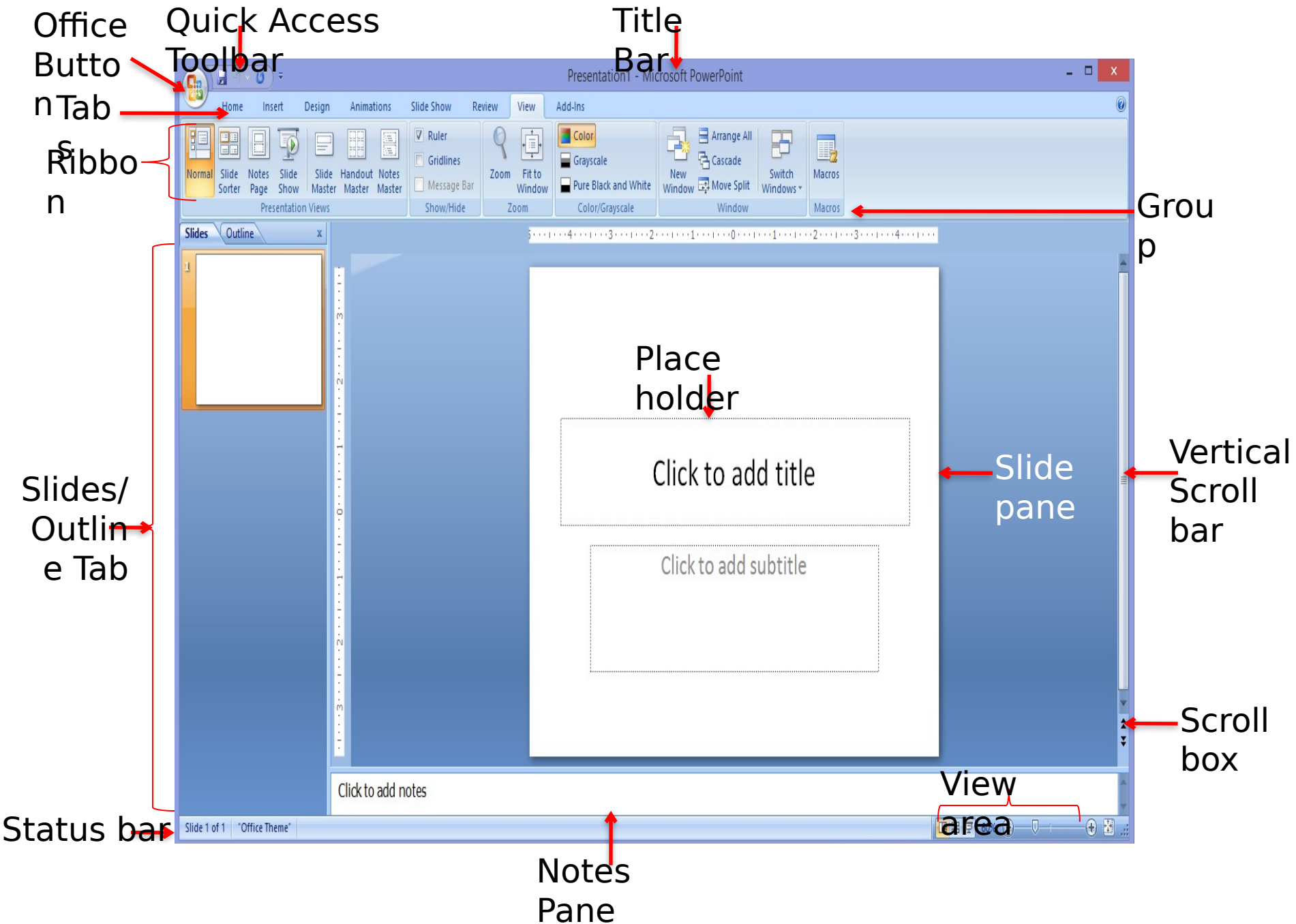
Click Start → Microsoft Office PowerPoint 2007

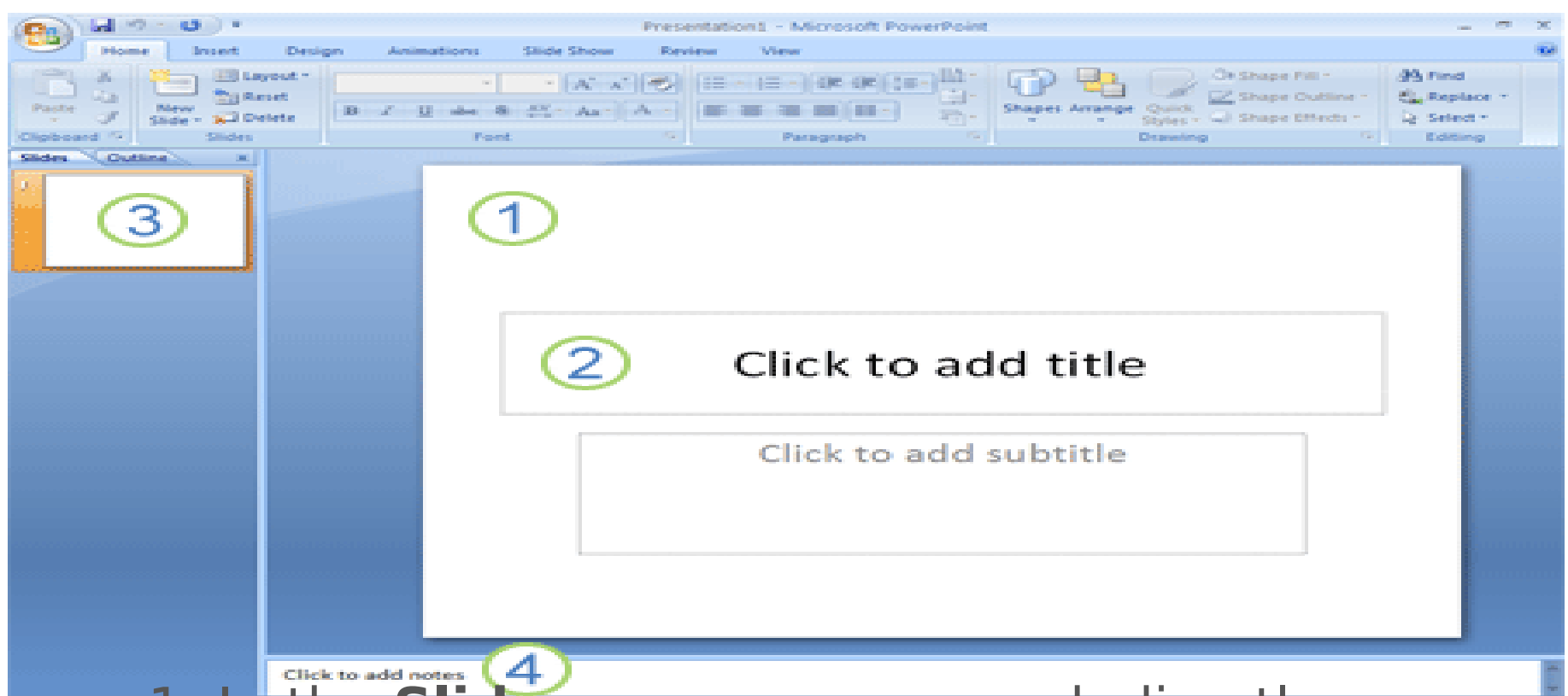
3. If you have not get Microsoft Office PowerPoint 2007 in All Programs, you should search it or follow the following steps:

Click Start → Run → Type the keyword 'POWERPNT' → click OK

4. If you are using Ms-PowerPoint frequently create a shortcut on desktop. Then make double click on the icon of PowerPoint 2007 on the desktop.

N.B: A newly created blank presentation is named





1. In the **Slide** pane, you can work directly on individual slides.
2. Dotted borders identify **placeholders**, where you can type text or insert pictures, charts, and other **objects**.
3. The **Slides** tab shows a **thumbnail** version of each full size slide shown in the **Slide** pane.
4. In the **Notes** pane, you can type notes about the current slide.

To create presentation with installed Template, perform the following steps:

- Click the **Microsoft Office Button** then click **New**.
- Click **Installed Templates** that you want.
- Click **Create** or Double-click the desired template.

To create your own presentation

- Click **Microsoft Office Button** then click **New**.
- Click **Blank and recent** under **Templates** and then double-click **Blank Presentation**.
- On the **Design** tab, in the **Themes** group, click the desired theme that you want to apply.
- To add slide, click **New Slide** button on **Home** tab.

To run presentation

- On the **Slide Show** tab, in the **Start Slide Show** group, click **From Beginning** button or click **From Current Slide** button.

To Save the presentation

- Click **Save** button from **Quick Access toolbar** or from **Office button Drop-down list** point to **Save As**.

 A ***placeholder*** is location on slide marked with a border that holds text or object.

To add transition and transition sound to all slides in presentation

- Slide transitions are animation-like effects that occur when you move from one slide to the next.
- On the **Animations** tab, in the **Transition to This Slide** group, click the transition that you want.
- You can choose other options in the **Transition to This Slide** group to control the transition speed, to add a sound, and to apply the same transition to all the following slides with the same transition.

To print Presentation

- Click **Microsoft Office Button** and then click **Print**.

Editing & Formatting Slides

- Editing can include functions such as
 - ✓ Rearranging and deleting slides;
 - ✓ Cutting, Copying & pasting text;
 - ✓ Changing the font, paragraph alignment & paragraph spacing; and
 - ✓ Changing the design theme, theme color & theme font.
- Formatting means customization of presentations by
 - ✓ Adding clipart images, pictures and so on.

To delete & move slides

- ❑ To delete slide, click **Slide Sorter** button in view area on *Status* bar.
- ❑ Click desired slide then *press Delete* key.
- ❑ To move slide, click **Slide Sorter** button in view area on *Status* bar.
- ❑ Drag slide to desired location.

To cut/copy and paste text in slides

- To cut/copy and paste text in slides, select the text & click **Cut/Copy** button in the **clipboard** group in the **Home** tab.
- Point to place where you want to add the new copy of the text and then click **Paste** button in the **clipboard** group in the **Home** tab.

To apply fonts & font effects

- To change the font, font size, font effects, etc, click the desired button in the **Font** group in the **Home** tab.

To insert a Picture/Clipart in a presentation

- Click placeholder that you want to add clip art.
- On the **Insert** tab, in the **Illustrations** group, click **Clip Art/Picture** button.
- In the **Clip Art** task pane, locate

To insert text box in a presentation

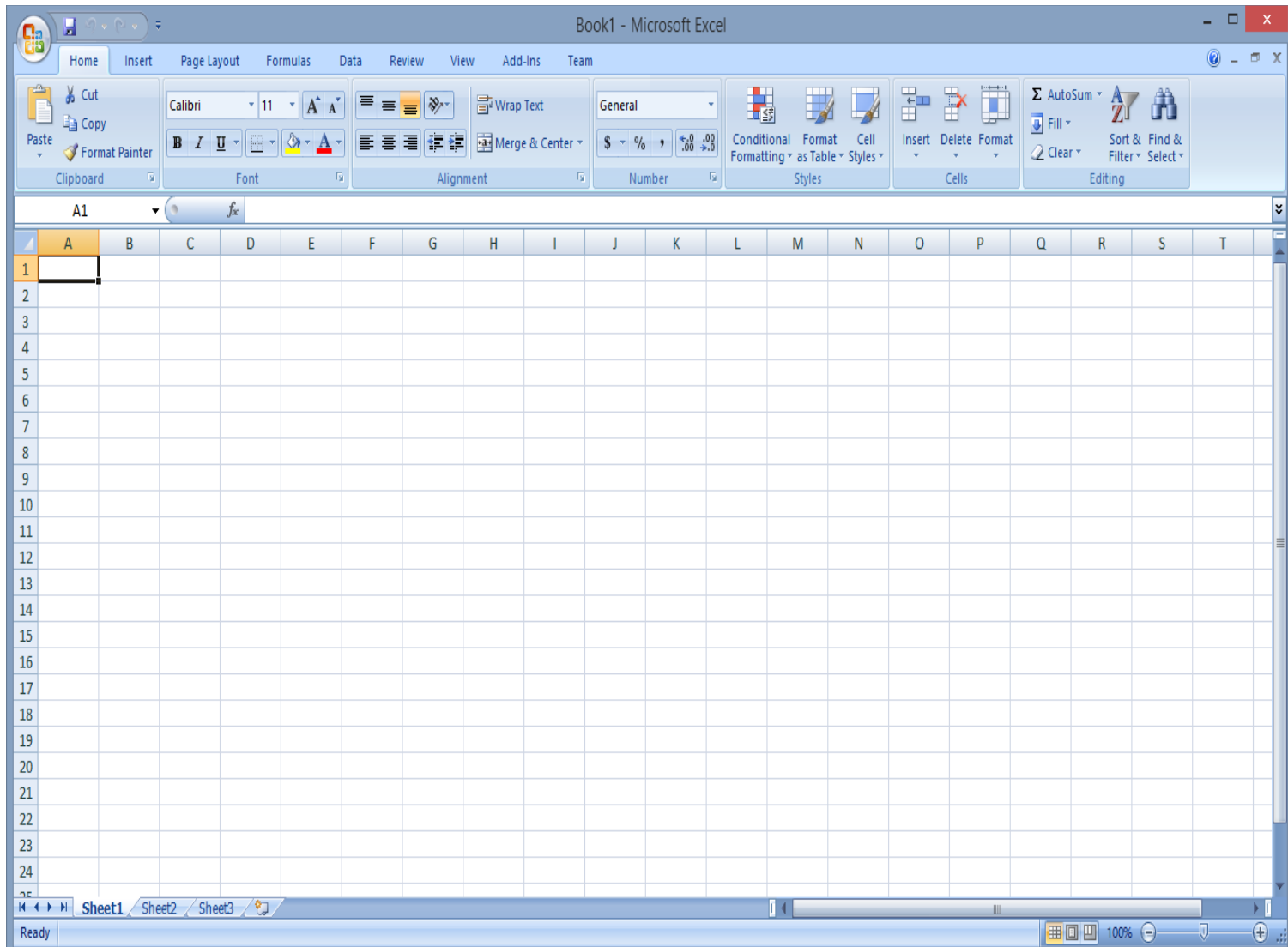
- On **Insert** tab, in the **Text** group, click **Text Box**.
- Click in the presentation, and then drag to draw the text box the size that you want.
- To add text to a text box, click inside the text box, and then type or paste text.

Spreadsheets

- Spreadsheet software is general purpose software application that used for both simple and complex calculations.
- Ms-Excel 2007 can also support graphics & perform some database tasks, such as sorting.
- A document in MS-Excel is called a ***workbook***.
- Workbook is a group of *worksheets* that belong to the same document.
- The electronic spreadsheet is a brain child of *Dan Bricklin & Bob Franktor*.
- Some examples of spreadsheets are Microsoft Excel, Corel Quattro Pro, OpenOffice Calc, Google Spreadsheets, Lotus-123, etc.

To start Ms-Excel 2007

- Microsoft Excel is a popular example of spreadsheet software.
1. Click Start → All Programs → Microsoft Office → Microsoft Office Excel2007
 2. If Microsoft Office PowerPoint 2007 is **Pinned to Start Menu**, we can follow only the following steps:
Click Start → Microsoft Office Excel 2007
 3. If you have not get Microsoft Office Excel 2007 in All Programs, you should search it or follow the ff steps:
Click Start → Run → Type the keyword 'EXCEL' → click OK
 4. If you are using Ms-Excel frequently create a



- When you start it directly creates a workbook for you.
- An Excel workbook initially 3 worksheets labeled sheet1, Sheet2 & *Sheet3*.
- Each worksheet in excel 2007 contains 1,048,576 rows and 16,384 columns, which provides you with 1,500% more rows and 6,300% more columns than you had available in Excel 2003. For those of you who are curious, columns now end at XFD instead of IV.
- A worksheet is primarily made of **cells** that are used to enter data.
- We can create formulas to add subtract

To create a workbook based on the templates

- To create a workbook based on the templates provided by Ms-Excel,
 - Click the *Office Button* and
 - Click *New*.
 - This would display the *New Workbook* dialog box.
 - In left frame, under *Templates*, you can click a category of your choice.

Editing and Formatting Worksheets

- The contents of a cell can be edited directly within the cell or in the *Formula* bar.
- **Clearing a cell** can involve removing the cell contents, format or both.
- **Spelling checker** will not highlight all errors and cannot check the accuracy of values.

Continued...

- **To edit a cell**

- Open Worksheet.
- Double click the cell to be edited.
- Insert/delete text.
- Press enter key or Click another cell.

- **To spell check**

- Open worksheet
- Click on **Review** tab, **Spelling** button.
- Click *Ignore once, Ignore All, Change* or *Add to dictionary* as needed.

Continued...

- **To insert/delete rows & columns**
 - Open worksheet
 - Select rows/ columns
 - Click **Insert/Delete** button on **Home** tab.
 - Click *Insert Sheet Rows/ Insert Sheet Columns* or
 - Click *Delete Sheet Rows/ Delete Sheet Columns*.
- **To move or copy cell(s) contents**
 - Open worksheet
 - Select cell or range of cells, i.e., source cell(s).
 - Click **Cut** or **Copy** button on **Home** tab, **Clipboard** Group .
 - Select starting destination cell.
 - Click **Paste** button.

Continued...

- Excel allows us to apply formatting attributes and add color to enhance the appearance of the worksheet and draw a reader's attention to important titles, totals or other results.
- **To change font, font size and font attributes**
 - Open worksheet
 - Select cell or range of cells.
 - Click **Font** *button* arrow **Font Size** *button* arrow or desired attribute button (bold, italic, underline, etc) on **Home** *tab*.
 - Click desired font or desired size.
 - Deselect cell(s).

No

te You can use the *Format Cells* dialog box (Press **Ctrl** + **Shift** + **F** keys) from the **Font** *tab* selected to change the font, font size, font style and color of text.

- Click **Undo** button on *Quick Access Toolbar* or Press **Ctrl** + **Z** keys to reverse last action.
- Click **Redo** button on *Quick Access Toolbar* or Press **Ctrl** + **Y** keys to redo last action.
- Excel 2007 stores up to 100 actions that can be undone or redone and we can repeat actions as many times as you need.
- Some actions (such as Save) cannot be reversed with **Undo**.

Using Functions and Creating Charts

- Excel's built in functions make the task of writing formulas easier.
- The functions are grouped by category such as **statistical**, **financial**, **database** and **logical**.
- The *Insert Function* dialog box is available to assist us in locating and creating function.
- Charts can be easily created to emphasize or compare data sets.

Continued ...

- **To use the built in functions**

- Open the worksheet.
- Make the desired cell active.
- Click AutoSum  button arrow in **Editing** Group on **Home** tab.
- Click desired function.
- Type or select the argument range.
- Press **Enter** key or Click **Enter** button on *Formula Bar*.

- **To create Charts**

- Open the worksheet.
- Select the cells containing the data you want to chart.
- Click **Insert** tab.
- Click **Column/Pie/Bar** button in the **Charts** Group.
- Click desired type chart.
- Move and/or resize as required.
- Apply design options.

IF Condition with AND or OR

- The **IF** function returns one value if a condition you specify evaluates to TRUE, and another value if that condition evaluates to FALSE. For example, the formula **=IF(A1>10,"Over 10","10 or less")** returns "Over 10" if A1 is greater than 10, and "10 or less" if A1 is less than or equal to 10.

The **Syntax** of **IF** function is:

- ✓ IF(Condition, value_if_true, [value_if_false])
- The 3 items b/n parentheses are **arguments** of **IF** function.
 - *Condition* is what you want to test for.
 - *Value if True* is what you want to do if the answer to the first argument is TRUE.
 - *Value if False* what you want to if the answer to the first argument is FALSE.
- You can use AND, OR, NOT and IF function to create conditional formulas.

AND ():

- It returns TRUE if all its arguments evaluate to TRUE; returns FALSE if one or more arguments evaluate to FALSE.

Syntax



AND(logical1, [logical2], ...)

- Here, **logical1**, **logical2**, ... are 1 to 255 conditions you want to test that can evaluate to either TRUE or FALSE.

Example

Data	Description (Result)
50	
104	

- Copy it
- Type the formulas **=AND(1<A2, A2<100)** and **=IF(AND(1<A3, A3<100), A3, "The value is out of range.")** in cell B2 & B3, respectively.
- It displays TRUE on cell B2 because the № in cell A2 is between 1 and 100.
- It displays the message "The value is out of range." in cell B3 b/se one condition is False.

OR ():

- It returns TRUE if at least one of the arguments is TRUE; returns FALSE if all its arguments are FALSE.

Syntax



OR(logical1, logical2, ...)

- Here, **logical1, logical2, ...** are 1 to 255 conditions you want to test that can evaluate to either TRUE or FALSE.

Example

Data	Description (Result)
50	
104	

- Copy it to 104
- Type the formulas **=OR(1>A2, A2>100)** and **=IF(OR(1<A3, A3<100), A3, "The value is out of range.")** in cell B2 & B3, respectively.
- It displays FALSE on cell B2 because all arguments are false.
- It displays the № 104 in cell B3 because one condition is true.



Microsoft Office
Publisher 2003

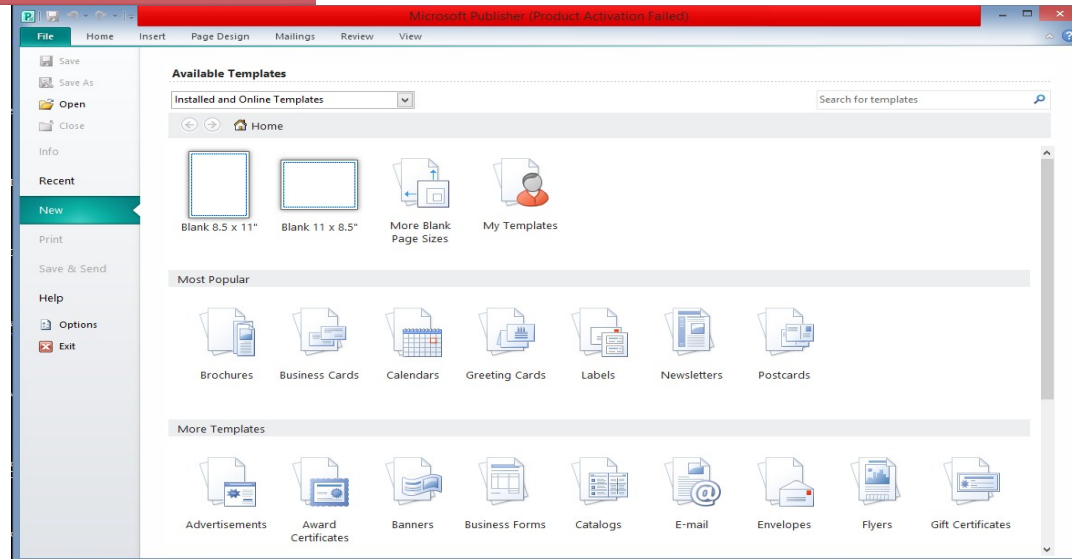
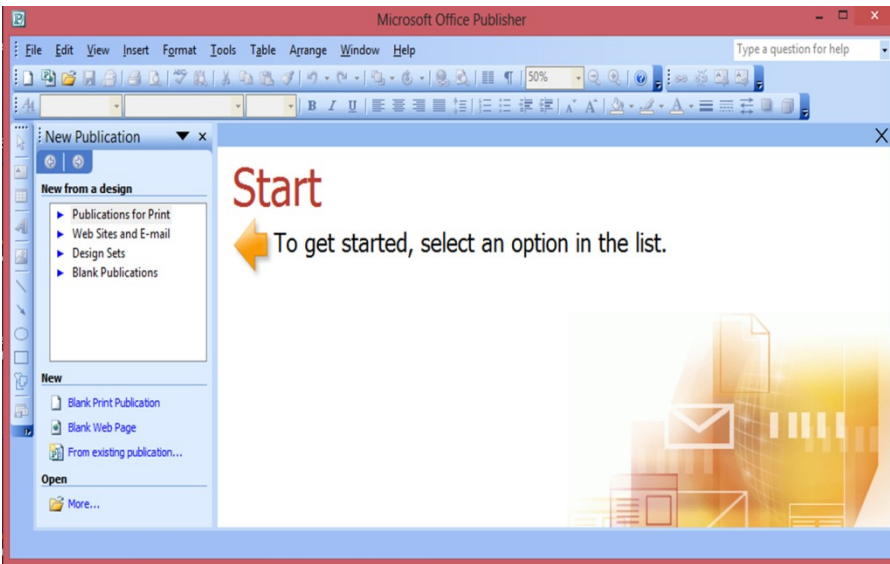


Microsoft Office
Publisher 2007



Microsoft
Publisher 2010

Publishing software





Microsoft Office
Publisher 2007

ublishing software

- **Desktop publishing (DTP)** is an application software that involves mixing text and graphics to produce high quality output for commercial printing, using a PC, scanner, laser or ink-jet printer and DTP software.
- The most important feature of desktop publishing system is that it helps user to see exactly how the design would appear when printed. This feature is called **WYSIWYG**.
- Desktop Publishing programs are used to create professional quality documents that combine text and other visual elements in non-linear arrangements.
- Some professional **DTP programs** are **QuarkXPress**, **Adobe InDesign** and **Adobe PageMaker**.
- Microsoft Office Publisher is a “low-end” consumer oriented DTP program.



Microsoft Office
Publisher 2007

Continued ...

- MS-Publisher 2007 is designed to specifically handle the various desktop publishing needs of individuals and small organizations.
- Publisher makes it easy to efficiently create a wide range of publications, from simple flyers (one-page, one-sided publications that are designed to be read at a glance) to complex brochures.
- Even novice users are able to work productively in publisher.



Microsoft Office
Publisher 2007

Creating New Publication

To start Publisher 2007

1. Click Start → All Programs → Microsoft Office → Microsoft Office Publisher 2007
2. If Microsoft Office Publisher 2007 is **Pinned to Start Menu**, we can follow only the following steps:
Click Start → Microsoft Office Publisher 2007
3. If you have not get Microsoft Office Publisher 2007 in All Programs, you should search it or follow the ff steps:
Click Start → Run → Type the keyword 'MSPUB' → click OK
4. If you are using Ms-Publisher frequently create a shortcut on desktop. Then make double click on the icon of Publisher 2007 on the desktop.

N.B: A newly created blank publication is named as *publication1*.



Microsoft Office
Publisher 2007



Database Management

- A database is a collection of related data that is organized so that it can easily be accessed, managed and updated.
- Database software can easily do calculations, such as showing monthly subtotals and an annual total for school expenses, but complex mathematical calculations should be done using the spreadsheets.
- Database software allow us to rearrange our information



- **Microsoft Office Access 2007** is one of the database creation and management program.
- Within Ms-Access there are four major Objects:
 - Table
 - Query
 - Form and



Tables store your data in your database.

- **Queries** ask questions about information stored in your tables.
- **Forms** allow you to view data stored in your tables.
- **Reports** allow you to print data based on queries/tables that you have created.



Basic Elements of a Database

- **Field:** A single component of information about a person, place, item or object.
- **Record:** All fields related to one logical unit in the table such as a student, teacher.
- **Table:** All of related records for one logical group.
- **Database:** A file containing related tables and objects.



Creating a Database

- **Database** is comprised of a series of objects used to enter, manage and view data.
- In a database the data is organized in form of tables.
- A table contains information for related items such as students, employees and inventory etc, broken down into individual units of information.



To start Access 2007

- ❖ Start → All Programs → Ms Office → Ms Office Access 2007
- ❖ Click on **Blank Database** → In the File Name field enter a ***Name for your Database*** → Click **Create**
- ❖ When you create a database, it opens a database window.
- ❖ The **Navigation Pane** displays the names of objects (e.g., Tables, Queries, Forms and Reports).

❑ To Open & Close the existing objects in Access 2007

- ❖ Start Access 2007 → Open the database file
- ❖ Double click on object name in Navigation pane
- ❖ Click the close button at top of right corner of the work area.

- ❖ Click Office Button & then Click Close Database at the

Template Categories

Featuring

Local Templates

From Microsoft Office Online

Business

Personal

Sample

Education

Getting Started with Microsoft Office Access

New Blank Database



Blank Database

Featured Online Templates



Assets



Contacts



Issues



Events



What's new in Access 2007?



The new Access 2007 contains more powerful tools to help you quickly track, report, and share information in a manageable environment. Learn more about the new features and improvements.

- Get the latest content while working in the 2007 Microsoft Office system
- Guide to Access 2007 User Interface
- Organize all your objects using the new, easy access Navigation Pane

More on Office Online:
[Training](#) | [Templates](#) | [Downloads](#)

Automatically update this content from Office Online

[Learn more](#)



Blank Database

Create a Microsoft Office Access database that does not contain any existing tables or objects.

File Name:

Training Database

C:\Documents and Settings\training\My Documents\

Create

Cancel



- Microsoft Access automatically creates a new table in the database called **Table1**.
- This is a temporary name remains until the table is saved.
- The **Primary Key is the unique identifier for each record in a table.**
- **Access** will not allow duplicate entries in a Primary Key field.
- By default, Access sets the first field in the table as the Primary Key field.
- An example of a Primary Key would be

Understanding the Views

There are 2 basic views when you work in a table: **Design View and Datasheet View.**

Design View is used to set the data types, insert or delete fields, and set the Primary key.

Datasheet View is used to enter the data for the records.

By default, Access places you in Datasheet View.

To Switch to Design view:

- 1) Click the **View button on the Home Ribbon**
- 2) Type a name for the table
- 3) Click **OK**



To Add Records to an existing table in Datasheet View

1. Make sure you are in Datasheet View
2. Enter the data into the table by pressing the tab key to move from one cell to another.
3. When you have completed the record (row),
 - Press Enter key from keyboard or
 - Click **New (Blank) Record** button in **Record Navigation bar** or
 - Click **New** button in **Records** group in **Home** tab.
4. Close the table.

training database : Database (Access)

Table Tools

Home Create External Data Database Tools Add-Ins Datasheet

View New Field Add Existing Fields Lookup Column Insert Delete Rename

Data Type: Unique Format: Formatting Is Required

Relationships Object Dependencies

Views Fields & Columns Data Type & Formatting Relationships

All Tables Table1

Table1

Table1 : Table

ID	Add New Field
*	(New)



Save As

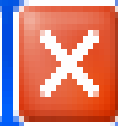


Table Name:

Employee Information Table

OK



Cancel

Home Create External Data Database Tools Datasheet

Views Clipboard Font Rich Text Records Sort & Filter Find

Calibri 11

B I U A [Color] [Background Color] [Table] [Table Border]

Refresh All New Save Delete More

Σ Totals ABC Spelling

A-Z Z-A Filter Selection Advanced Toggle Filter

Find Replace Go To Select

All Tables

Employee Information Table

Employee Information Table

Employee Information Table : ...

First Name	Last Name	Address	City	State	Zip	Employee ID	Add New Field
MARY	SMTIH	110 JONESDALE	METUCHEN	NJ	08840	1	
CARRIE	JONES	45 HEMLOCK DR	EDISON	NJ	08820	2	
MARK	DAVIS	12 ANNETE DR	EDISON	NJ	08820	3	
STEVE	STIEN	15 COTTONWOOD	EDISON	NJ	08820	4	
MIKE	ROBERTS	67 UNIVERSAL	CRANFORD	NJ	08976	5	
*							

● To Add Records to an existing Table in Form view

- 1) Click the **View** button on the Ribbon to **switch from Layout View to Form View**
 - 2) Enter the data for each field in the record, pressing the **Enter** key to move to the next field
 - 3) Press **Enter** after you have entered **data for the last field**
- This will send the record to the table.

To Sort Records by Single Field

1. Open the table to be sorted.
2. Position your cursor in the field that you wish to sort by, by clicking on any record in that field.
3. Click either **Ascending** or **Descending** Button in **Sort & Filter** Group in **Home** tab.
4. Close table.

Notice: The Table below has been sorted by the Last Name field in ascending order.

training database : Database (Access 2007) - Microsoft Access

Table Tools

Home Create External Data Database Tools Datasheet

Views Clipboard Font Rich Text Records Sort & Filter Find

All Tables

Employee Information Table

First Name	Last Name	Address	City	State	Zip	Employee ID	Add New Field
MARK	DAVIS	12 ANNETE DR	EDISON	NJ	08820	3	
CARRIE	JONES	45 HEMLOCK DR	EDISON	NJ	08820	2	
MIKE	ROBERTS	67 UNIVERSAL	CRANFORD	NJ	08976	5	
MARY	SMTIH	110 JONESDALE	METUCHEN	NJ	08840	1	
STEVE	STIEN	15 COTTONWOOD	EDISON	NJ	08820	4	
*							



To create a Table in Design View in Access 2007

1. Click the **Create** tab.
2. Click **Table Design** button in the **Tables** group.
3. Type **Name** for the *First Field* in Table → Press **Enter**
4. Select a **Data Type** → Press **Enter**
5. Type a description for the field → Press **Enter**
6. Continue this until all necessary fields have been entered into the table.
7. Assign **Primary Key**
8. Save the Table.

Note: The order that you enter the field names is the order the fields will appear in the table and on a form.



Before proceeding, it is important to understand common Microsoft Access Data Types. (Explained in the table below)

Data Type	Description	Size
<i>Text (most common data type)</i>	Alphanumeric data	Up to 255 characters
Memo	Alphanumeric data; sentences and paragraphs	Up to 64,000 characters
Number	Numeric data	1,2,4, or 8 bytes.
Date/ Time	Dates and times	8 bytes
Currency	Currency data, stored with 4 decimal places	8 bytes
Auto-Number	Unique value generated by Access for each new record	4 bytes
Yes/No	Boolean (true/false) data	1 bit
OLE Object	Pictures, graphs, or other ActiveX objects from another Windows-based application	Up to about 1 gigabyte
Hyperlink	A link "address" to a document or file on the Web, local network, or on your computer	Up to 2048 characters

Home Create External Data Database Tools Add-Ins Design

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Lookup Column Property Sheet Indexes Show/Hide

All Tables Employee Information Database

Employee Information Datab... Employee Information Datab...

Field Name	Data Type	Description
First Name	Text	
Last Name	Text	
Address	Text	
City	Text	
State	Text	
Zip	Text	
Employee ID	Number	

Field Properties

General	
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Indexed	Yes (Duplicates OK)
Smart Tags	
Text Align	General

The data type determines the kind of values that users can store in the field. Press F1 for help on data types.

Design view. F6 = Switch panes. F1 = Help.



Input Masks

Input Mask is used to pre-format a field to “look/act” a certain way when user inputs data.

Example: You could create an input mask for a Social Security Number field that automatically inserts the dash.

- The Input Mask data can either be stored in the table or simply displayed and not stored. (The latter is preferred)

To Create an Input Mask for a Field

- 1) Open a table in Design View
- 2) Click in a field for which you'd like to create an input mask
- 3) In the Field Properties section at the bottom of the screen, click in the **Input Mask line and notice the Build button that appears at the right end** of the line. (see below)
- 4) Click the Build button
- 5) Select Input Mask
- 6) Click Next
- 7) Select a Placeholder character
- 8) Click Next



Input Mask Wizard

Which input mask matches how you want data to look?

To see how a selected mask works, use the Try It box.

To change the Input Mask list, click the Edit List button.

Input Mask:

Data Look:

Phone Number	(206) 555-1212
Social Security Number	831-86-7180
Zip Code	98052-6399
Extension	63215
Password	*****
Long Time	1:12:00 PM

Try It:

Edit List

Cancel

< Back

Next >

Finish



Input Mask Wizard

Do you want to change the input mask?

Input Mask Name: User Defined

Input Mask: 000-00-0000

What placeholder character do you want the field to display?

Placeholders are replaced as you enter data into the field.

Placeholder character: #

Try It:

Cancel

< Back

Next >

Finish

Input Mask Wizard

How do you want to store the data?

- ☐ With the symbols in the mask, like this:

264-31-6851

- ☒ Without the symbols in the mask, like this:

744423152

Cancel

< Back

Next >

Finish

9) Select **Without the symbols in the mask**

10) Click **Next**

11) Click **Finish**

- Now, when entering data that has been formatted with an Input Mask, you do not have to type the format into the record.
- The following is an example of a table with a field that has been formatted with an Input Mask on the Social Security Field.
- Notice, the only thing that the user has



training database : Database (Access 2007) - Microsoft Access

Table Tools

Home Create External Data Database Tools Datasheet

View

Paste

Format Painter

Calibri 11

B *I* U A Color Background

Font

Rich Text

Refresh All

New

Save

Delete

Totals

Spelling

More

Records

Filter

Selection

Advanced

Toggle Filter

Sort & Filter

Find

All Tables

Employee Information Table

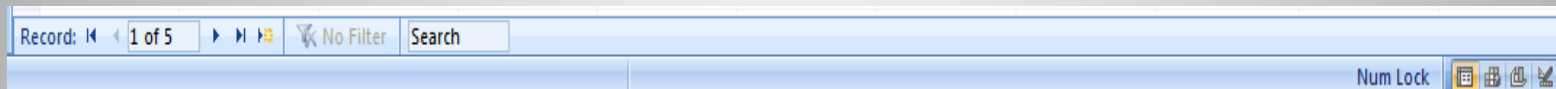
Employee Information Table	First Name	Last Name	Address	City	State	Zip	Employee IC	Social Securi
Employee Information Table : ...	MARY	SMTIH	110 JONESDALE	METUCHEN	NJ	08840	1	555-##-####
	CARRIE	JONES	45 HEMLOCK DR	EDISON	NJ	08820	2	
	MARK	DAVIS	12 ANNETE DR	EDISON	NJ	08820	3	
	STEVE	STIEN	15 COTTONWOOD	EDISON	NJ	08820	4	
	MIKE	ROBERTS	67 UNIVERSAL	CRANFORD	NJ	08976	5	
*								



Navigating Records

Use the arrows at the bottom of the table to navigate among records. You are able to navigate from the first record, previous record, next record, last record, and create a new record (as shown in the picture below).

- Notice that the total number of records in the table is shown at the right end of the navigation arrows.



Queries

- You use Queries to view, change, and analyze data in different ways.
- You can also use them as a source of records for forms and reports.

To Create a Query

- 1) Click the **Create tab** on the Ribbon.
- 2) Click **Query Design** icon.
- 3) Double-click **Create Query in Design View**
- 4) Select Table that you would like to base your Query on
- 5) Click **Add** → Close the **Show Table window** → The table(s) will now be displayed in the upper part of the Query Design Screen by boxes containing the tables' fields.

training database : Database (Access 2007) - Microsoft Access

Home Create External Data Database Tools Design

SQL View Run Results

Select Make Table Append Update Crosstab Delete

Union Pass-Through Data Definition

Insert Rows Insert Columns Delete Rows Delete Columns

Show Table Builder Return: All

Property Sheet Table Names Totals Parameters Show/Hide

All Tables Employee Information Table Query1

Employee Information Table

Employee Information Table : ...

Show Table

Tables Queries Both

Employee Information Table

Add Close

Field:								
Table:								
Sort:								
Show:								
Criteria:								
or:								

- **Defining Criteria in the Query**

In order to control which records are displayed, you must define criteria in a Query.

The most common type of Query is the Select Records Query which will be discussed below.

To Define Criteria for your Query:

- 1) Position your cursor in the criteria row in the field for which you wish to define the criteria for
- 2) Enter the criteria

Example: To find all people in the table who live in Edison:

Position your cursor in the **criteria row of the City field**

- Type **Edison**
- Click the **Run Query button**

Below is a picture of the results of the above query:



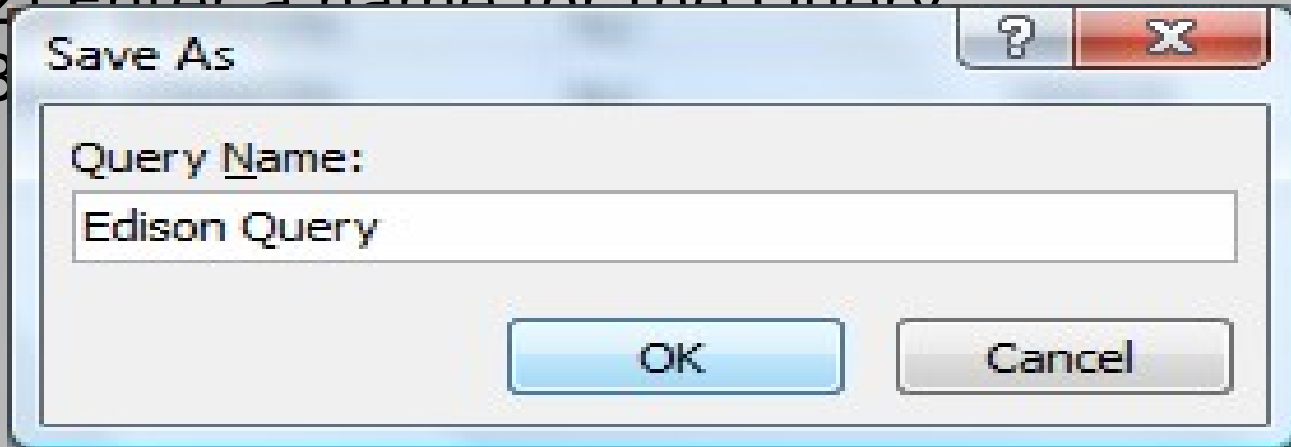
Employee Information Table		Query1					
	First Name ▾	Last Name ▾	Address ▾	City ▾	State ▾	Zip ▾	Employee ID ▾
	CARRIE	JONES	45 HEMLOCK DR	EDISON	NJ	08820	2
	MARK	DAVIS	12 ANNETE DR	EDISON	NJ	08820	3
	STEVE	STIEN	15 COTTONWOOD	EDISON	NJ	08820	4
*							

The result of a query is called a **record set**.

A record set can be sorted, printed or
filtered in the same manner as a table.

To Save the Query:

- 1) Click the **Save Icon**
- 2) Enter a name for the Query
- 3)



- **Note:** When saving a select Query, you are saving the question that you are asking, not the results that you see when you run the Query.

- **Creating a Form Using the Forms Wizard**

A form is a database object that is used to enter or display data in a database.

To Create a Form by Using Form Wizard

- 1) Navigate to the table you want to base the form on
- 2) Click **Create on the Ribbon**
- 3) Click **Forms**

You are able to navigate using the navigation arrows at the bottom of the form.

Note: The form feeds the table. If you edit a record on the form, or create a new record, that data will be passed to the table it is associated with.

training database : Database (Access 2007) - Microsoft Access

Home Create External Data Database Tools

View Paste Cut Copy Format Painter Views Clipboard Font Rich Text Records Sort & Filter Find

All Tables Employee Information Table Edison Query Employee Information Table

Employee Information Table

Employee Information Table : ...

Edison Query

Employee Information Table

First Name: Jerry

Last Name: Hawkins

Address: 59 Home St

City: Metuchen

State: NJ

Zip: 08840

Employee ID: 6

Reports

Reports can be based on tables or queries and can be made with the Report Wizard.

To Create a Report Using the Report Wizard:

- 1) Click the **Create** tab on the **Ribbon**
- 2) Click the **Report Wizard icon**
- 3) Select the table or query upon which the report will be based
- 4) Select the fields that you want to include on the report by double clicking on them
- 5) Click **Next**
- 6) If you would like to **Add Grouping To Your Report**, select the field you wish to *Group By Double Clicking On It (Example: City)*
- 7) Click **Next**
- 8) Select a style for the report
- 9) Click **Next**
- 10) Type a title for the report
- 11) Click **Finish**

training database : Database (Access 2007) - Microsoft Access

Print Preview

Print Size Portrait Landscape Margins Show Margins Print Data Only Columns Page Setup Zoom One Page Two Pages More Pages Refresh All Excel SharePoint List Word Text File More Close Print Preview Close Preview

All Tables Employee Information Table Edison Query Edison Report

Employee Information Table

Employee Information Table : ...

Edison Query

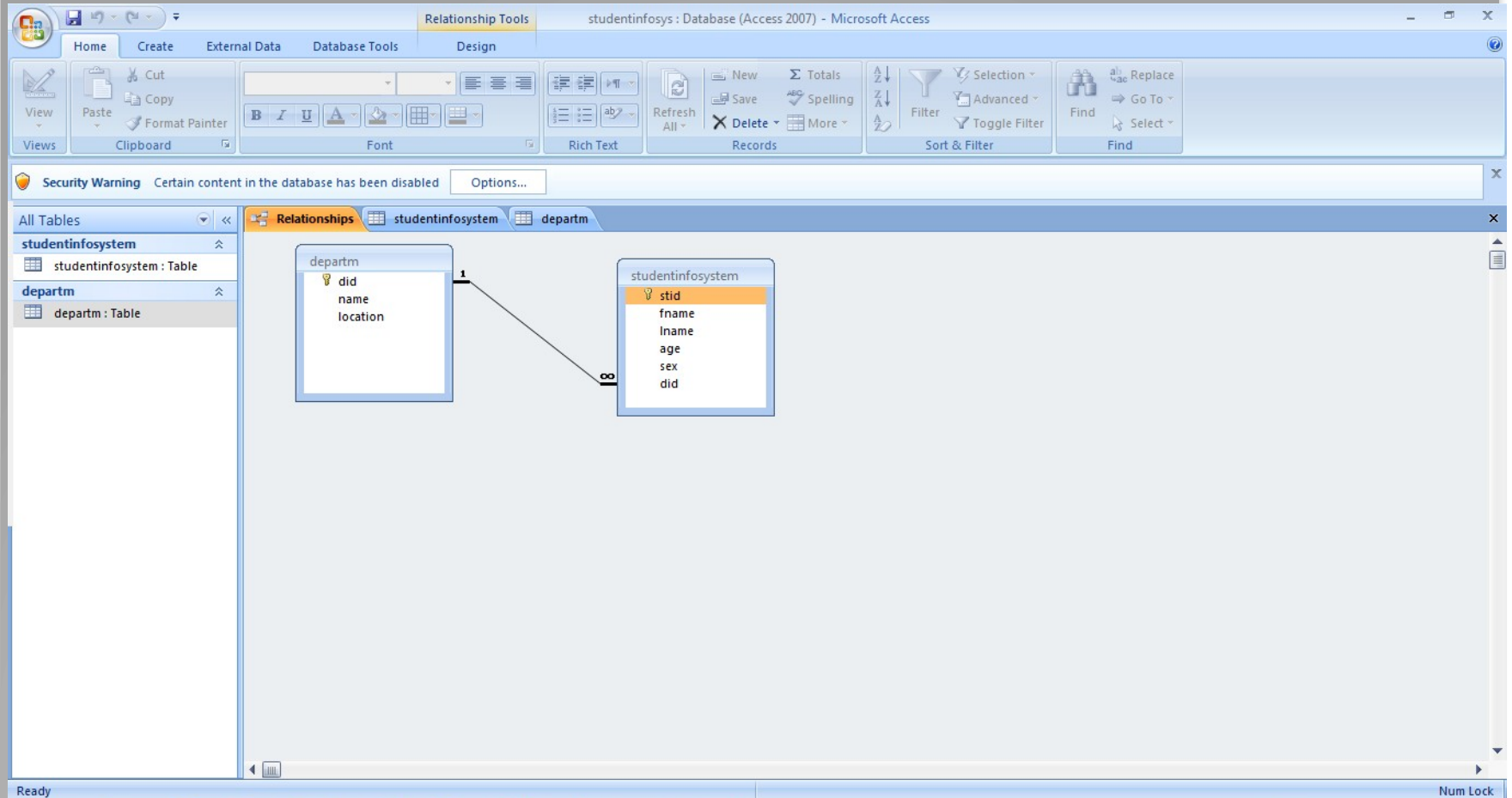
Employee Information form

Edison Report

Edison Report

City	Last Name	First Name	Address	State	Zip	ID
EDI						
	DAVIS	MARK	12 ANNETE DR	NJ	08820	3
	JONES	CARRIE	45 HEMLOCK DR	NJ	08820	2
	STIEN	STEVE	15 COTTONWOOD CT	NJ	08820	4

Relationship



Database Management

- To delete records in a datasheet & form view
- To create table by adding records