

Lab # 1: Introduction

Course: BESE 15 B

Instructor: Lab Engr. Nausheen

OBJECTIVE

The purpose of this lab is to give a basic overview of MS Visio. The manual discusses how to install and use MS Visio. The lab will also cover basic introduction to UML.

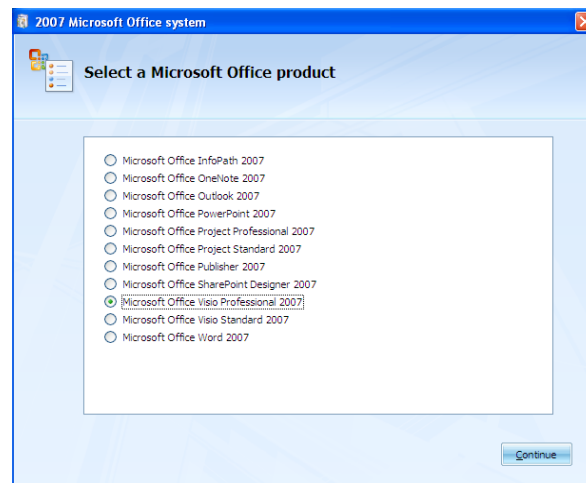
INSTALLATING MS VISIO

Software is available at:

\\csdept\data\Resources\Software\Applications\Document Explorers\Office\MS Office 2007 (DVD)

Step 1: Run the setup.exe file.

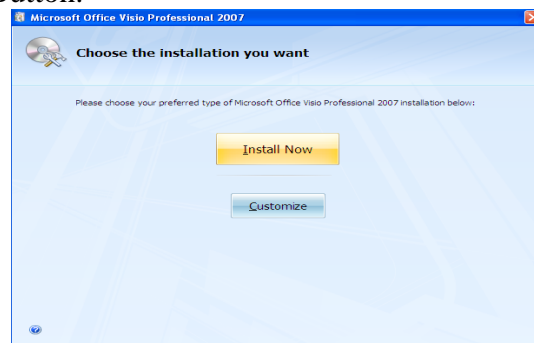
Step 2: Select Microsoft Office Visio Professional 2007 and click Continue Button.



Step 3: On next screen, enter Product Key and click Continue Button. The Product key is given in text file named as Serial_No.

Step 4: Check the checkbox “I accept the terms of this agreement” and click Continue Button.

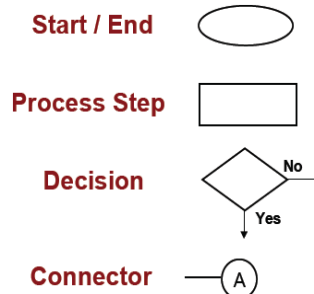
Step 5: Click Install Now Button.



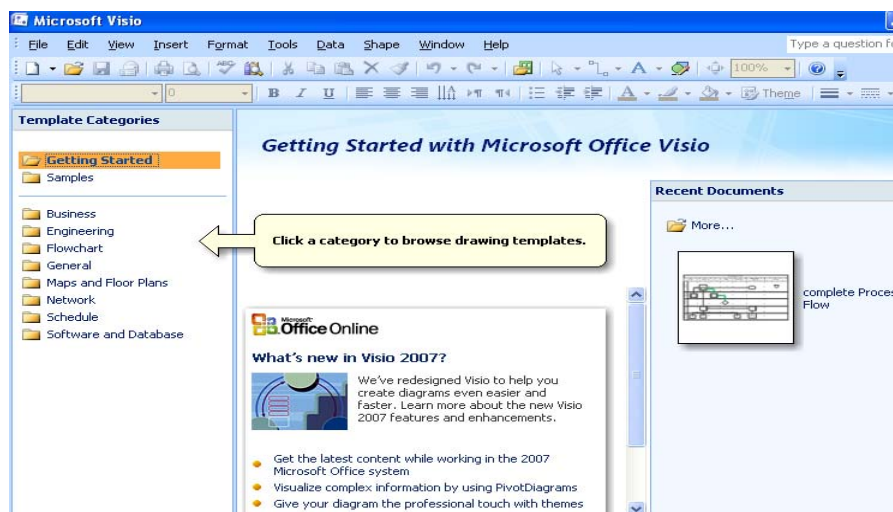
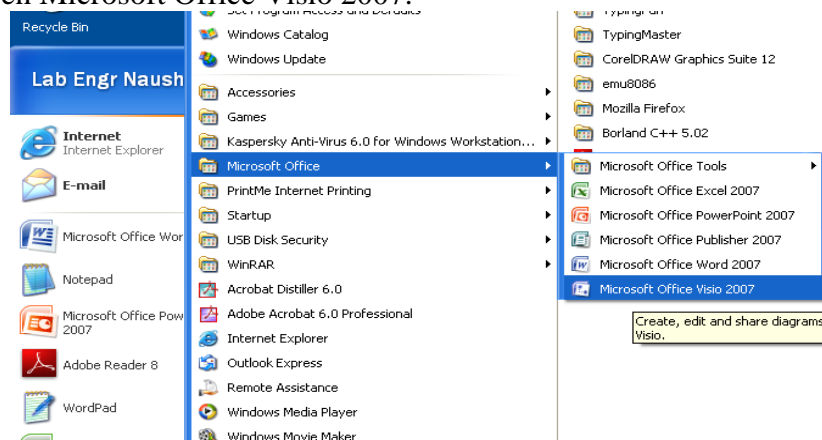
Step 6: Click Close Button when installation is complete.

USING MS VISIO

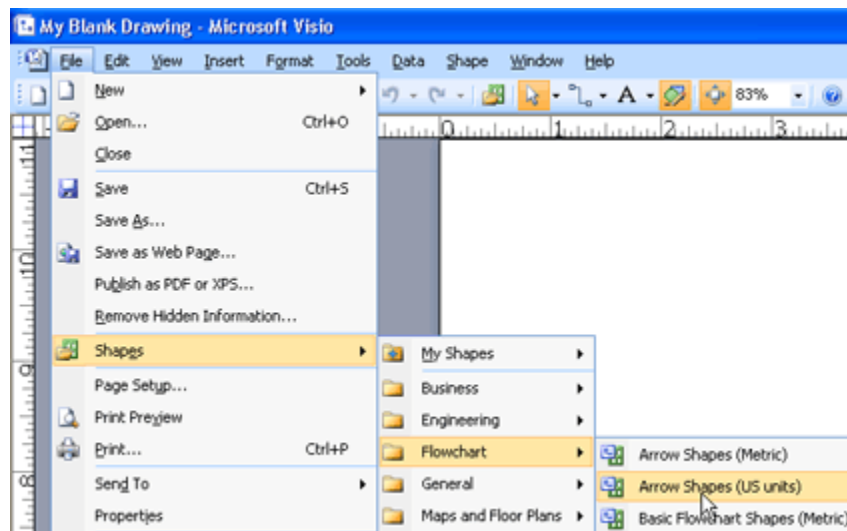
In today's lab, we will practice how to make flow charts in MS Visio. The purpose of a flow chart diagram is to depict the nature and flow of steps in a process. The basic symbols used for drawing a flow chart are:



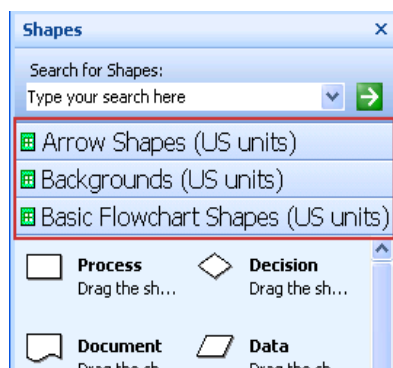
Step 1: Now Open Microsoft Office Visio 2007.



Step 2: Click Flow Chart Button from right pane, select basic flow chart and then click Create Button. Alternate way: On the File menu, point to Shapes, point to the category that you want, and then click the name of the stencil that you want to use.



The stencils that open with the **Basic Flowchart** template are called **Arrow Shapes**, **Backgrounds**, and **Basic Flowchart Shapes**.

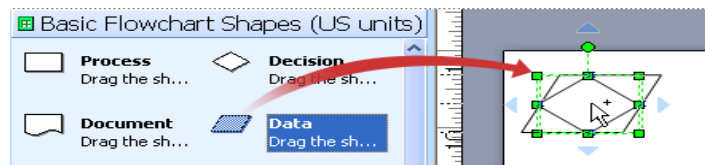


Step 3 (Drag and connect shapes): To create your drawing, all you need to do is drag shapes from stencils onto the blank drawing page and connect them to one another. There are many ways to connect shapes, but for now let's use the fastest — drag the shapes on top of each other to connect them automatically by using **AutoConnect**. For more information, see [Add and glue connectors with AutoConnect](#).

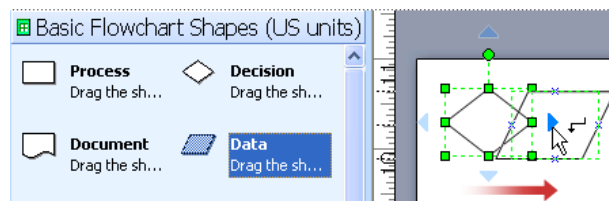
Drag your first shape from the **Basic Flowchart Shapes** stencil onto the drawing page, and then release the mouse button.



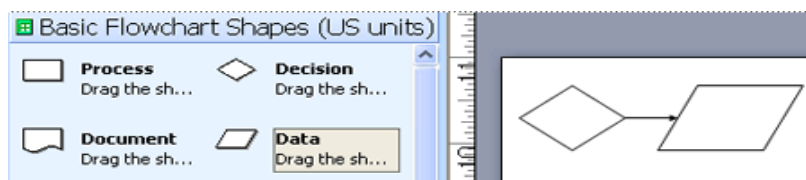
Drag your second shape on top of the first so that the blue arrows show, but don't release the mouse button yet.



While holding the mouse button, move your pointer on top of the blue arrow that points toward where you want to place the second shape.



Now release the mouse button. Your shapes are connected, and the first shape points to the second shape.

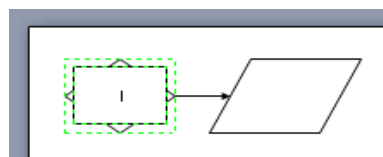


Continue to build your drawing by repeating the steps mentioned above.

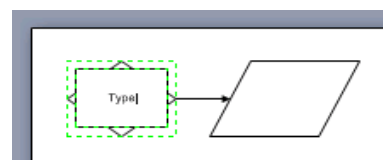
Step 4 (Add text to shapes): Although some drawings make a point all by themselves, it's often helpful and sometimes necessary to add text to the shapes. There are many ways to add text to shapes, but for now let's use the simplest way. If you want to learn more ways to add text to shapes, see [Add data to shapes](#) and [Add imported data to shapes](#).

Add text directly to a shape

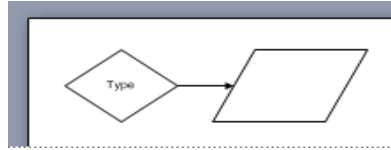
1. Double-click the shape.



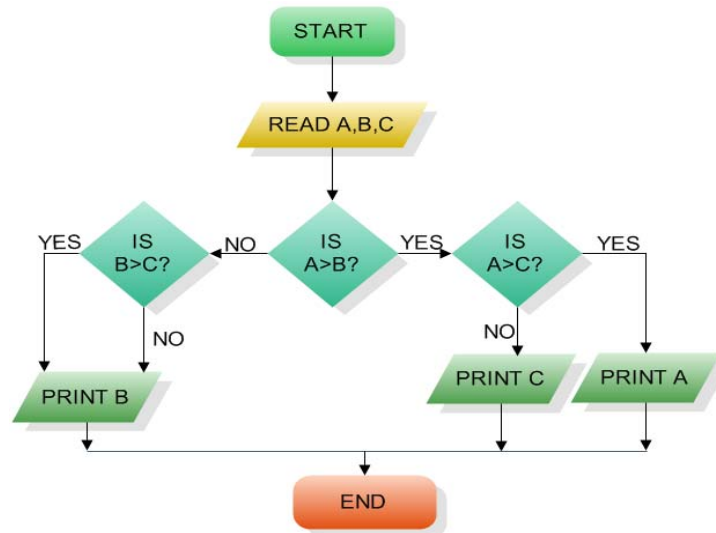
2. Start typing.



3. When you finish typing, click on a blank area of the drawing page.



The example flow chart for finding the largest among three numbers is given below:



Note: The files are saved with extension: .vsd

TASKS

1. Familiarize yourself with menu on top bar (File, Edit etc.).
2. Draw and submit flowchart for a cashier program. The program works as follows:
 - First it asks user to enter the code of the item purchased by a customer.
 - If item code is valid, the description and price for that code is displayed on the screen.
 - If item code is invalid, message is displayed “Item Code doesn’t exists”.
 - Then it asks for the quantity of the particular item code entered. If quantity is less than zero, it prompts user to enter quantity greater than zero.
 - It displays the subtotal thereafter.
 - Moreover, it keeps on accepting item codes until ‘0’ is pressed.
 - Consequently, it displays the total amount due.
 - Then, it asks the user to tender the amount of cash of the customer. It should not accept amount of cash less than the amount due.
 - Finally, it displays the change.

Note: Individually submit the .vsd file on following link by your name:

<\\csdept\data\Assignments\Lab Engr Nausheen\BESE15B - SDA\Lab1 Submissions>

UNIFIED MODELING LANGUAGE (UML)

- The Unified Modeling Language (UML) is a standard graphical modeling language that is used to express designs.
- Best for modeling large and complex systems.
- **Diagrams in UML:**

