PROGRAMMING WITH VISUAL BASIC

A Computer program is an application used to accomplish any task imaginable in soft form.

Definition of Visual Basic

Visual Basic (VB) is a programming language that provides a graphical user interface for creating software systems that are able to run under Microsoft Windows environment.

It is modeled in line with BASIC language, which was originally created to help students learn how to programme.

Features of Visual Basic

Visual Basic has the following features:

1. It is an event-driven programming language.
   An event is a response generated by the program when the user performs an action, e.g., click a mouse.
   The response depends on the code held in an event procedure. An event procedure is a group of self-contained statements that are executed by the computer when a trigger action is performed, e.g., a mouse click may cause a menu to be displayed on the screen.

2. It has a collection of tools called controls that are used by programmers. The controls can be accessed easily by clicking their icons on the toolbox to select them.

3. It has special objects called forms that have a title bar at the top. The programmer can then add controls such as a menu bar, status bar, toolbars, buttons, and slide bars to the form when creating an application.

Starting Microsoft Visual Basic

1. Click on Start, point to Programs, point to Microsoft Visual Studio, then select Microsoft Visual Basic.
   The New Project dialog box, which contains different icons is displayed. This dialog box allows you to set up a new project.

2. Click New tab, then double-click the Standard.EXE icon.
   The application window usually referred to as the Visual Basic Integrated Development Environment (IDE) appears.

Features of Visual Basic Integrated Development Environment (IDE)

The following are some of features found on the Visual Basic application window:

(a) Standard toolbar:
   The standard toolbar contains the standard icons that are shortcut commands to the Menu bar commands.
   NB: Point to an icon and a text tip will appear telling you the name of the icon.
   ♦ To execute a Visual Basic project, click the Start button on the toolbar (or, select Start from the Run menu).
   ♦ To suspend the execution of the program temporarily, click the Break button. To resume the run, select Continue from the Run menu.
   ♦ To stop the execution of the program, click the End button.
(b) **Forms and controls:**
Forms & controls are generally called *objects*. An *Object* is usually associated with an event. This means that, objects have their own *properties* and *methods*. The *properties* define the appearance of the object, while the *method* is a predefined action that can be set to occur or affect the object, e.g., *show* method makes a form visible on the screen.

**Form design window:**
This is where the programmer designs the user interface for the program. To design the user interface, select the relevant *control icons* from the toolbox, then place them on the form design window. The control can then be moved & resized as desired.

**NB:** To move the entire form around on the screen, hold the title bar of the project container window, then drag it to the required position.

(c) **Project window:**
The *project window* displays a list of files associated with a particular project. The files represent forms and program modules in the project.

(d) **Properties window:**

(e) Code editor window:
(f) Form layout window:
(g) The Visual Basic toolbox: