

Excel Assignment – 17

1. What are modules in VBA and describe in detail the importance of creating a module?

Ans: A VBA module is used to store any VBA code that have been written in the VBE (Visual Basic Editor). The modules are contained within a VBA Project and when the file is saved be it an Excel workbook, Word document or Access database, the module or modules are saved within that file. That file is essentially the parent application of the module.

When we write our VBA code, we usually use more than one module. It is good coding practice to 'group' our code into relevant modules - for example put all the global variables in one module, all public functions in another module etc.

2. What is Class Module and what is the difference between a Class Module and a Module?

Ans: Class module is used to create objects at run time. It allows you to create your own objects which can have their own properties and methods like any other object (range, worksheet, Excel, chart etc). The best way of describing is by use of a simple example. Say you wanted to have code that would allow you to create an invoice object, assign it a number, customer name, net amount, and VAT. You'd then want to save that invoice as a new workbook. A standard module can store procedures and functions which can be either Private or Public (the default) and can be accessed either from within that module only (Private) or from anywhere in the project (Public). Modules are also used to store variables, constants and declarations (i.e., API calls) that will need to be accessed from anywhere in the project.

3. What are Procedures? What is a Function Procedure and a Property Procedure?

Ans: A procedure is a unit of code enclosed either between the Sub and End Sub statements or between the Function and End Function statements. A procedure should accomplish a simple well-defined task.

1. **Function Procedure:** A Function procedure is enclosed between Function and End Function. It also performs some tasks but must also return a value. A function procedure is analogous to a mathematical function. It may not modify a spreadsheet, for example by deleting rows.
2. **Property Procedure:** A property procedure is a series of Visual Basic statements that allow a programmer to create and manipulate custom properties. Property procedures can be used to create read-only properties for forms, standard modules, and class modules.

4. What is a sub procedure and what are all the parts of a sub procedure and when are they used?

Ans: A Sub procedure is a series of Visual Basic statements enclosed by the Sub and End Sub statements that perform actions but doesn't return a value. A Sub procedure can take arguments, such as constants, variables, or expressions that are passed by a calling procedure. If a Sub procedure has no arguments, the Sub statement must include an empty set of parentheses.

5. How do you add comments in a VBA code? How do you add multiple lines of comments in a VBA code?

Ans: To add a single line of comment, type an apostrophe (') at the start of line. To add multiple line of comments, select entire text to be commented, then click on comment block on edit toolbar.