**ITEC397 Chapter 08 LABWORK**

1. **An example for a Runtime Error**
* Open a macro-enabled Excel sheet, go to developer Tab, open the Visual Basic editor, if it is not created, create a module (module1)
* Create a sub routine named example\_08\_01
* Write the code and run it to see the “Compiler Error” you have done.

*Sub example\_08\_01()*

 *result = 0*

 *x = 0*

 *result = 1000 / x*

 *MsgBox "Result= " & result*

*End Sub*

* Here, x is equal zero, so result = 1000 / x will generate a runtime error – “Division by zero”
1. **An example for an error handling**
* Create a sub routine named example\_08\_02
* Write the following code and run it

*Sub example\_08\_02()*

 *On Error GoTo err\_handler*

 *result = 0*

 *x = 0*

 *result = 1000 / x*

 *Exit Sub*

*err\_handler:*

 *MsgBox "Result= " & result*

*End Sub*

* Even the - *result = 1000 / x -* line still generates a runtime error, it is captured and not allowed the application to halt.
1. **An example for the use of Resume statement in error handling**
* Create a sub routine named example\_08\_03
* Write the following code and run it

*Sub example\_08\_3()*

*On Error GoTo err\_handler*

 *MsgBox "The code is starting to run here !!!"*

 *result = 0*

 *x = 0*

 *result = 1000 / x*

 *MsgBox "The code is not running here !!!"*

 *Exit Sub*

*ExitHere:*

 *MsgBox "The code is still running !!!"*

 *Exit Sub*

*err\_handler:*

 *MsgBox "Error " & Err.Number & ": " & Err.Description, vbCritical, "ErrorThingy"*

 *Resume ExitHere*

*End Sub*

1. **An example for a Programmer Defined Error and it’s handling**
* Create a sub routine named example\_08\_04
* Write the code below and run it.

*Sub example\_08\_04()*

 *On Error GoTo err\_handler*

 *result = 0*

 *x = 19*

 *If ((x < 18) Or (x > 65)) Then*

 *MsgBox "Before Error.Raise"*

 *Err.Raise 1500, , "Working age have to be (18-65)"*

 *End If*

 *x = 3*

 *MsgBox "After Error.Raise"*

 *Exit Sub*

*err\_handler:*

 *MsgBox "Error(" & Err.Number & ") - " & Err.Description*

*End Sub*

* A programmer defined (Logic) Error is defined with a number 1500, and description as *"Working age have to be (18-65)"* and raised with the rule

 *If ((x < 18) Or (x > 65)) Then*.

* + This error is successfully handled at the err\_handler section of the subroutine.

**Additional Material:** Open the following link and trace the examples to make these topics more clearly in your mind!!!

<https://stackoverflow.com/questions/1038006/good-patterns-for-vba-error-handling>