1. **What is a variable and what is a constant?**

Variable is used to store temporary information that is used for execution within the Procedure, Module or Workbook.

A constant is a meaningful name that takes the place of a number or string that does not change. Constants store values that, as the name implies, remain the same throughout the execution of an application.

1. **When should you use Option Explicit?**

Use Option Explicit statement to force explicit declaration of all variables in the module.

1. Write a line of code that would declare a variable to hold the value of a stock.

Dim STOCK\_PRICE as Double

1. Write a line of code that would calculate the average of five daily returns known as m\_MonReturn, m\_TuesReturn, m\_WedReturn, m\_ThursReturn, m\_FriReturn.

AVG\_VAL = (m\_MonReturn + m\_TuesReturn + m\_WedReturn, + m\_ThursReturn + m\_FriReturn) / 5

1. What is a concatenation operator? What is the value of a string variable known as strOptionSymbol, if strOptionSymbol = "INTC" & " " & "Sep" & " " & "50"?

A a concatenation operator concatenates multiple strings into a single string, you can use the "&" operator to separate the string values.

strOptionSymbol = "INTC Sep 50"

1. What are the two types of structures discussed in this lesson?

Decision structures and repetition structures. A decision structure allows the program to make decisions. The most common of them is the If...Then structure. However, VBA provides other possibilities: If...Then...Else, ElseIf, Select Case, and IIF.

A repetition structure goes through a block of code either a predefined number of times, or until something occurs to cause the program to break out of the loop. VBA provides two broad repetition structures: For...Next and Do...Loop. Within those two structures, there are a number of variations.

1. Assume you bought stock in MMZR at 50, write an if...then...else structure to sell the stock if it goes up by 10% or down by 5%.

Dim ENTRY\_PRICE\_VAL As Double

Dim CURRENT\_PRICE\_VAL As Double

ENTRY\_PRICE\_VAL = 50

CURRENT\_PRICE\_VAL = 50 \* 1.2

If (CURRENT\_PRICE\_VAL >= (ENTRY\_PRICE\_VAL \* 1.1)) Or \_

(CURRENT\_PRICE\_VAL <= (ENTRY\_PRICE\_VAL \* 0.95)) Then

ACTION\_STR = "SELL"

Else

End If

1. What is the difference between the following two loops:

The

Do While x < 10

x=x+1

Loop

will check the condition first before executing the content, x=x+1.

Whereas a

Do

x=x+1

Loop While x < 10

executes the content of the loop, x=x+1, once before checking the condition of the while.

1. What are the different repetition structures available in VBA?

For...Next and Do...Loop. Within those two structures, there are a number of variations.

1. Take a look at the following piece of code:

For j = 0 To 2

Fori=0To3

Debug.Print i \* j

Nexti

Next j

What would be printed out to the immediate window?

0 ' i=0 j=0

0 ' i=1 j=0

0 ' i=2 j=0

0 ' i=3 j=0

0 ' i=0 j=1

1 ' i=1 j=1

2 ' i=2 j=1

3 ' i=3 j=1

0 ' i=0 j=2

2 ' i=1 j=2

4 ' i=2 j=2

6 ' i=3 j=2