Experiment No. 6

Aim :- Use any automated test tool and demostrate the use of i) if...else ii) For...loop iii) Do....Until iv) Switch.....case.

Theory :- AutoIt v3 is a freeware BASIC-like scripting language designed for automating the Windows GUI and general scripting. It uses a combination of simulated keystrokes, mouse movements and window/control manipulation in order to automate tasks in a way not possible or reliable with other language.

AutoIt was initially designed for PC "roll out" situations to reliably automate and configure thousands of PCs. Over time it has become a powerful language that supports complex expressions, user functions, loops and everything else that veteran scripters would expect. Feature :-

- Easy to learn BASIC-like syntax.
- Simulate keystroke and mouse movements
- Manipulate windows and process.
- Interact with all standard windows controls
- Scripts can be compiled into standalone executables
- Create Graphical User Interface
- COM supports.

- Regular expression
- Directly call external DLL and Windows API functions
- Scriptable RUSAs functions
- Detailed helpfile and large community-based support forums
- Compatible with Windows XP SP3/ 2003 SP2/ Vista / 2008 / Windows 7 / 2008 R2 / Windows 8 / 2012 R2.
- Unicode and x64 support
- Digitally signed for peace of mind
- Works with Windows User Account Control.

Use: 1) If.... else

If < expression > Then statement.

```
#include <MsgBoxConstants.au3>
Local $iNumber = -20
IF $iNumber > 0 Then
        MsgBox ($MB_SYSTEMMODAL, "Example",
                "$iNumber was positive!")
ElseIf $iNumber < 0 Then
        MsgBox ($MB_SYSTEMMODAL, "Example",
                "$iNumber was negative!")
Else
        MsgBox ($MB_SYSTEMMODAL, "Example",
                "$iNumber was zero.")
EndIF
```

2) For... Loop

For <variable> = <start> To <stop> [step <stepval>]
statements....
Next

A For loop will execute zero times if:
start > stop and step ≥ 0, or
start < stop and step is negative

```
#include <MsgBoxConstants.au3>

For $i = 5 To 1 Step -1
    MsgBox ($MB_SYSTEMMODAL, "Count down!"
            & @CRLF & $i)
Next
    MsgBox ($MB_SYSTEMMODAL, "", "Blast OFF!")
```

3) Do... Until

Do
statements
.....
Until <expression>

Do.... Until statements may be nested.
The expression is tested after the loop is executed, so the loop will be executed one or more times.

```
#include <MsgBoxConstants.au3>

Local $i = 0
Do
    MsgBox ($MB_SYSTEMMODAL, "", "The value of $i is:" & $i); Display the value of $i.

    $i = $i + 1 ; or $i += 1 can be used as well.

Until $i = 10; Increase the value of $i until it equals the value of 10.
```

4) Switch.... Case

```
Switch <expression>
Case <value> [To <value>] [, <value> [To <value>]...]
statement1
...
[Case <value> [To <value>] [, <value> [To <value>]...]
statement2
[Case Else
statementN
...]
EndSwitch
```

If no cases match the Switch value, then the Case Else section, if present, is executed. If no cases match and Case Else is not defined, then none of the code inside the Switch structure, other than the initial expression, will be executed.

Switch statement may be nested. Switch statements are case-insensitive.

```
#include <MsgBoxConstants.au3>

Switch @HOUR
  case 6 To 11
     $sMsg = "Good Morning"
  Case 12 To 17
     $sMg = "Good Afternoon"
  Case 18 To 21
     $sMg = "Good Evening"
  Case Else
     $sMsg = "What are you still doing up?"
EndSwitch

MsgBox ($MB_SYSTEMMODAL, "", $sMsg)
```

Conclusion: Thus we have installed and configured Tool AutoIt v3 and demonstrated use of IF_else, for_loop, Do_until and Switch_case.

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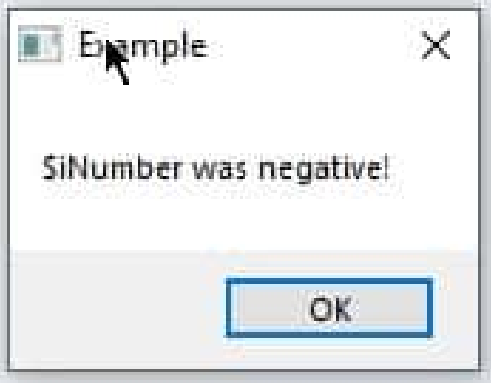
1 practical7.au3 2 practical7_2.au3 3 practical7_3.au3 4 practical7_1.au3

```
1  #include <MsgBoxConstants.au3>
2  Local $iNumber = -20
3  If $iNumber > 0 Then
4  MsgBox($MB_SYSTEMMODAL, "Example", "$iNumber was positive!")
5  ElseIf $iNumber < 0 Then
6  MsgBox($MB_SYSTEMMODAL, "Example", "$iNumber was negative!")
7  Else
8  MsgBox($MB_SYSTEMMODAL, "Example", "$iNumber was zero.")
9  EndIf
```



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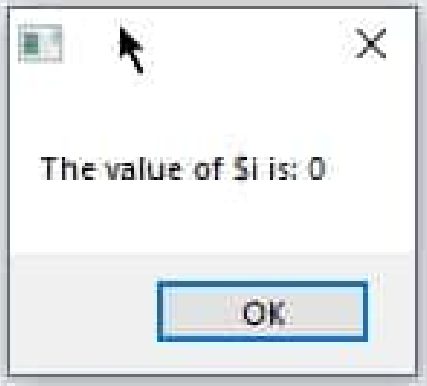
1 practical7.au3 2 practical7_2.au3

```
1  #include <MsgBoxConstants.au3>
2  Local $i = 0
3  Do
4  MsgBox($MB_SYSTEMMODAL, "", "The value of $i is: " & $i) ; Display the value of $i.
5   $i = $i + 1 ; Or $i += 1 can be used as well.
6  Until $i = 10 ; Increase the value of $i until it equals the value of 10.
```



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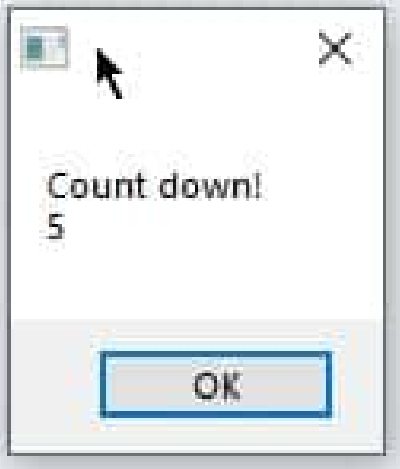
```
1
2   #include <MsgBoxConstants.au3>
3   For $i = 5 To 1 Step -1
4   MsgBox($MB_SYSTEMMODAL, "", "Count down!" & @CRLF & $i)
5   Next
6   MsgBox($MB_SYSTEMMODAL, "", "Blast Off!")
```



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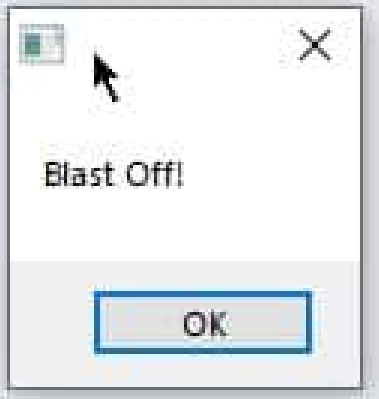
```
1
2   #include <MsgBoxConstants.au3>
3   For $i = 5 To 1 Step -1
4   MsgBox($MB_SYSTEMMODAL, "", "Count down!" & @CRLF & $i)
5   Next
6   MsgBox($MB_SYSTEMMODAL, "", "Blast Off!")
```



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1 practical7.au3 | 2 practical7_2.au3 | 3 practical7_3.au3

```
1   #include <MsgBoxConstants.au3>
2   Local $sMsg = ""
3   Switch @HOUR
4   Case 6 To 11
5    $sMsg = "Good Morning"
6   Case 12 To 17
7    $sMsg = "Good Afternoon"
8   Case 18 To 21
9    $sMsg = "Good Evening"
10  Case Else
11   $sMsg = "What are you still doing up?"
12  EndSwitch
13  MsgBox($MB_SYSTEMMODAL, "", $sMsg)
14
```