Practical No. 07

Aim: Create any GUI application e.g. calculator and automate using autoIT v3 toolkit

PAGE NO.
DATE

Practical No. 07

Aim: Create any GUI application e.g. Calculator and automate using autoit V3 tool.

Theory:

AutoIt is constantly evolving as a programming language. It started as an add-on tool to automate basic tasks in GUI's of other programs, and task automation (such as sending a keystroke or clicking a button.) is still at the heart of AutoIt. With the introduction of many new features, ~~such~~ however, AutoIt has become a more powerful tool than ever before.

Just a few of the new and updated features include:

- GUI Automation - Create a custom graphical interface for your application.
- COM (object) functionality fills the gap ~~of~~ with WSH languages such as VBScript / JScript.
- Loops, Functions and expression parsing.
- An enormous number of functions handling and manipulating strings.
- A Perl-compatible regular expression engine using the PCRE library, with native 16 bit mode and UCP/UTF support.
- A powerful recursive File List to Array function.
- Easily call Win32 and third-party DLL APIs from within your script.

PAGE NO.
DATE

Calc GUI :

```
#include <EditConstants.au3>
#include <GUIConstantsEx.au3>
#include <StaticConstants.au3>
#include <WindowsConstants.au3>
GUICreate("Calculator", 260, 230)
$idBtn1 = GUICtrlCreateButton("1", 54, 138, 36, 29)
Local $idBtn0 = GUICtrlCreateButton("0", 54, 171, 36, 29)
Local $idBtn1 = GUICtrlCreateButton("1", 54, 138, 36, 29)
Local $idBtn2 = GUICtrlCreateButton("2", 93, 138, 36, 29)
Local $idBtn3 = GUICtrlCreateButton("3", 132, 138, 36, 29)
Local $idBtn4 = GUICtrlCreateButton("4", 54, 106, 36, 29)
Local $idBtn5 = GUICtrlCreateButton("5", 93, 106, 36, 29)
Local $idBtn6 = GUICtrlCreateButton("6", 132, 106, 36, 29)
Local $idBtn7 = GUICtrlCreateButton("7", 54, 73, 36, 29)
Local $idBtn8 = GUICtrlCreateButton("8", 93, 73, 36, 29)
Local $idBtn9 = GUICtrlCreateButton("9", 132, 73, 36, 29)
Local $idBtnPeriod = GUICtrlCreateButton(".", 132, 171, 36, 29)

Local $idBtnMClear = GUICtrlCreateButton("MC", 8, 73, 36, 29)
Local $idBtnMRestore = GUICtrlCreateButton("MR", 8, 106, 36, 29)
Local $idBtnMStore = GUICtrlCreateButton("MS", 8, 138, 36, 29)
Local $idBtnMAdd = GUICtrlCreateButton("M+", 8, 171, 36, 29)

Local $idBtnChangeSign = GUICtrlCreateButton("+/-", 93, 171, 36, 29)
Local $idBtnDivision = GUICtrlCreateButton("/", 171, 73, 36, 29)
Local $idBtnMultiplication = GUICtrlCreateButton("*", 171, 106, 36, 29)
```

PAGE NO.
DATE

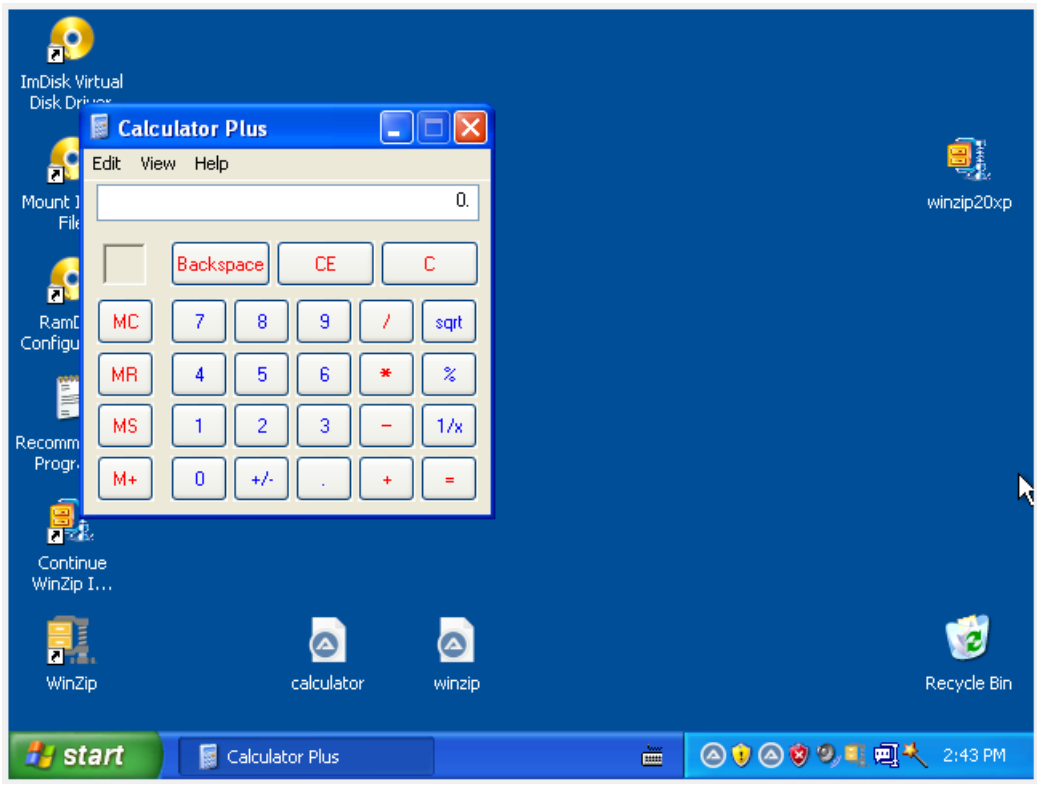
```
Local $idBtnSubstract = GUICtrlCreateButton("-",171,138,36,29)
Local $idBtnAddition = GUICtrlCreateButton("+",171,171,36,29)
Local $idBtnAnswer = GUICtrlCreateButton("=",210,171,36,29)
Local $idBtnInverse = GUICtrlCreateButton("1/x",210,138,36,29)
Local $idBtnSqrt = GUICtrlCreateButton("sqrt",210,73,36,29)
Local $idBtnPercentage = GUICtrlCreateButton("%",210,106,36,29)
Local $idBtnBackspace = GUICtrlCreateButton("backspace",54,37,63,29)
Local $idBtnClearE = GUICtrlCreateButton("CE",120,37,62,29)
Local $idBtnClear = GUICtrlCreateButton("C",185,37,62,29)
Local $idEdtScreen = GUICtrlCreateButton("0.",8,2,239,23)
Local $idLblMemory = GUICtrlCreateButton("",12,39,27,26)
GUISetState()
Local $msg
DO
    $msg = GUIGetMsg()
Until $msg = $GUI_EVENT_CLOSE

Local $idEdtScreen = GUICtrlCreateButton("0.",8,2,239,23,BitOR($ES_READONLY,
                     $ES_RIGHT),$WS_EX_STATICEDGE)
Local $idLblMemory = GUICtrlCreateButton("",12,39,27,26,$SS_SUNKEN)
```

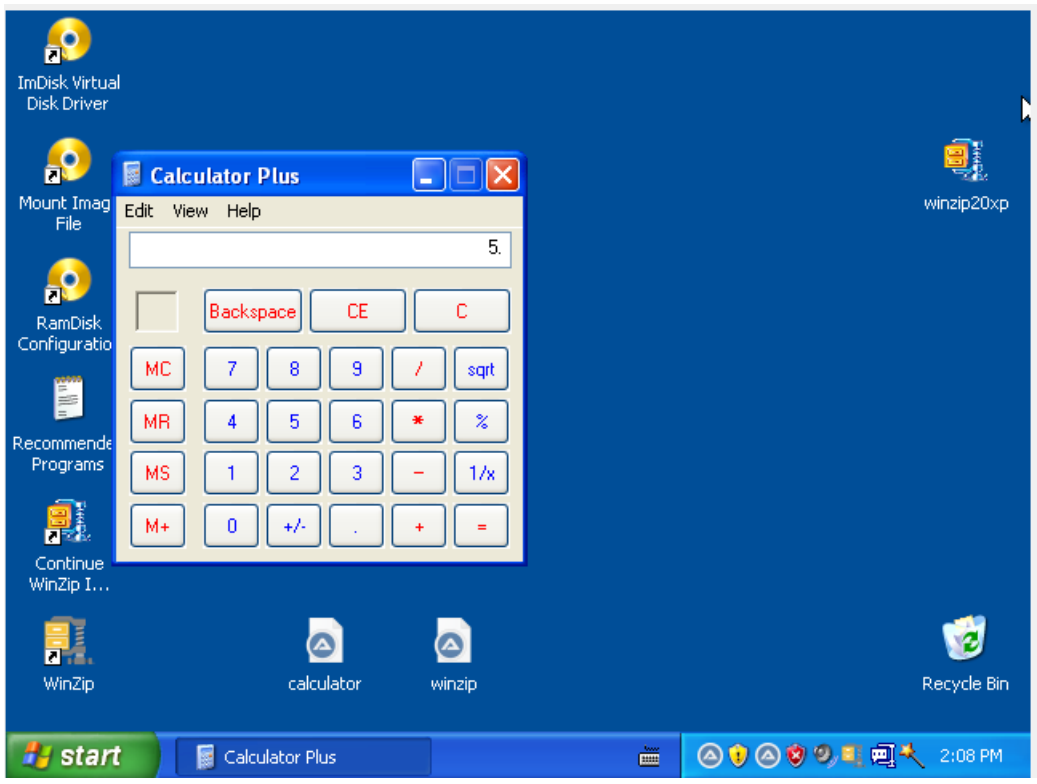
Operations:

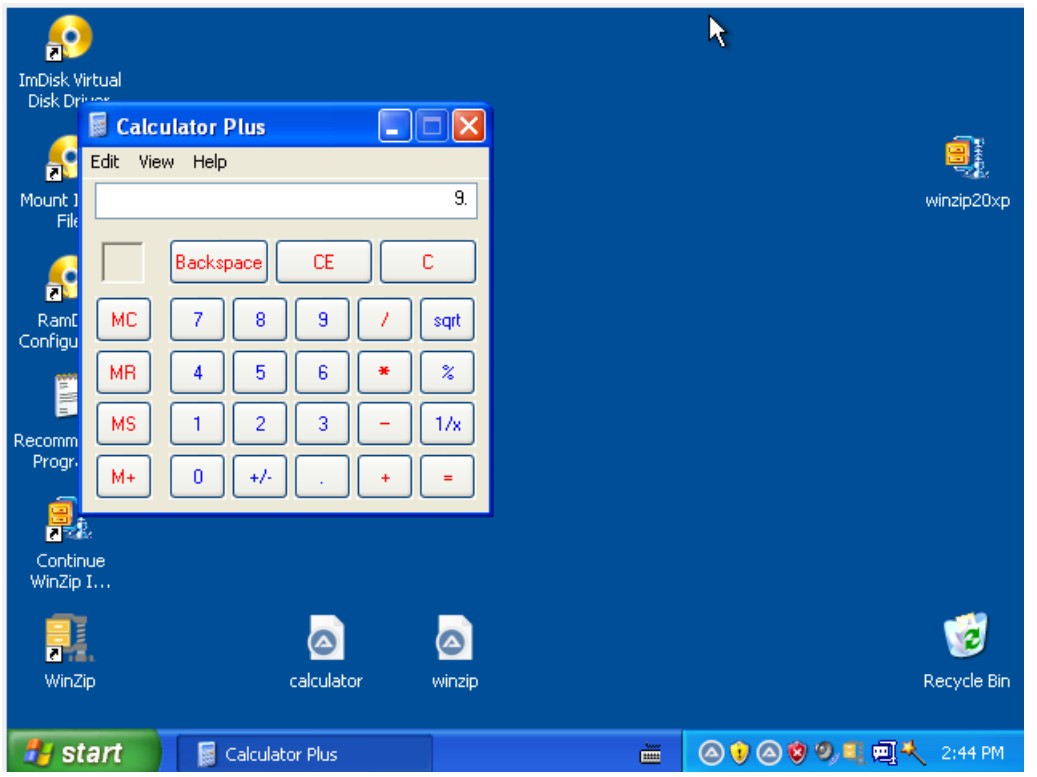
```
$1 = InputBox("Maths","Number:","")
$operation = InputBox("Maths","+,-,*,:","")
$2 = InputBox("Maths","plus number:","")
$plus = $1 + $2
$minus = $1 - $2
$times = $1 * $2
```

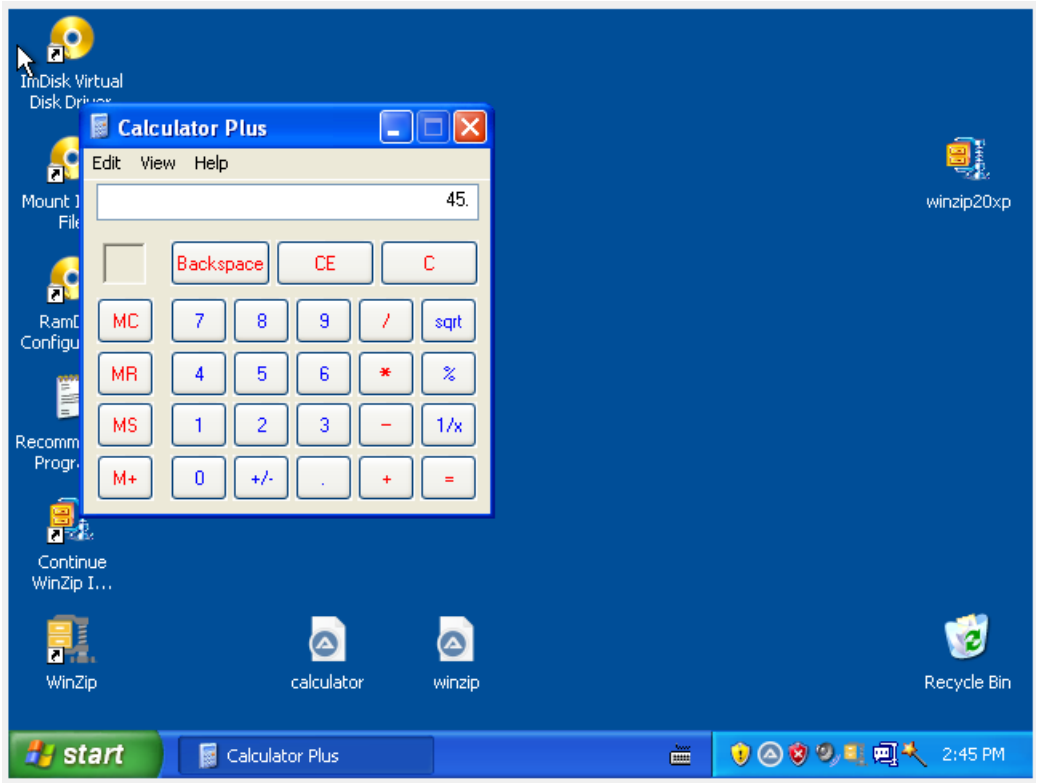
Conclusion:

Thus, we have studied and executed a program in AutoIT v3 to create Calculator and automated it using AutoIT v3.


Calculator Plus
Edit View Help
0.
Backspace CE C
MC 7 8 9 / sqrt
MR 4 5 6 * %
MS 1 2 3 - 1/x
M+ 0 +/- . + =
ImDisk Virtual Disk Dri...
Mount I... File
RamD... Configu...
Recomm... Progr...
Continue WinZip I...
WinZip
calculator
winzip
winzip20xp
Recycle Bin
start
Calculator Plus
2:43 PM


Calculator Plus
Edit View Help
5.
Backspace CE C
MC 7 8 9 / sqrt
MR 4 5 6 * %
MS 1 2 3 - 1/x
M+ 0 +/- . + =
ImDisk Virtual Disk Driver
Mount Imag... File
RamDisk Configuratio...
Recommende... Programs
Continue WinZip I...
WinZip
calculator
winzip
winzip20xp
Recycle Bin
start
Calculator Plus
2:08 PM


Calculator Plus
Edit View Help
9.
Backspace CE C
MC 7 8 9 / sqrt
MR 4 5 6 * %
MS 1 2 3 - 1/x
M+ 0 +/- . + =
ImDisk Virtual Disk Dri...
Mount I... File
RamD... Configu...
Recomm... Progr...
Continue WinZip I...
WinZip
calculator
winzip
winzip20xp
Recycle Bin
start
Calculator Plus
2:44 PM


ImDisk Virtual
Disk Dri...
Mount I
File
RamD
Configu
Recomm
Progr...
Continue
WinZip I...
WinZip
calculator
winzip
winzip20xp
Recycle Bin
Calculator Plus
Edit View Help
45.
Backspace CE C
MC 7 8 9 / sqrt
MR 4 5 6 * %
MS 1 2 3 - 1/x
M+ 0 +/- . + =
start
Calculator Plus
2:45 PM

PAGE NO.
DATE

```
If $operation = "+" Then
        MsgBox ("", "Maths", "=" & $plus)
EndIF
If $operation = "-" Then
        MsgBox ("", "Maths", "=", & $minus)
EndIF

If $operation = "*" Then
    MsgBox ("", "Maths", "=" & $times)
EndIF
```

Automate:

```
Run ("Calc.exe", "")
Sleep (2000)
In WinExists ("Calculator", "") Then
  ControlClick ("Calculator", "", 129)
  sleep(1000)
  ControlClick ("Calculator", "", 91)
  sleep(1000)
  ControlClick ("Calculator", "", 133)
  sleep(1000)
  ControlClick ("Calculator", "", 112)
  sleep (1000)
```

Conclusion:

Control:

Thus, we have ~~divide~~ studied and Executed a Program in AutoIt v3 to create a Calculator and automate it using AutoIt v3.