

FIBONACCI SERIES AND SUM OF N NUMBERS

AIM

To write a simple program using loops and decision making statements to generate Fibonacci series and sum of N numbers.

ALGORITHM

Step 1: Start the process.

Step 2: Click → All programs → Microsoft Visual Studio → Microsoft Visual Basic 6.0.
→ New Project → Standard.Exe

Step 3: Add one label control, one textbox control, one list box control and two command button controls.

Step 4: Fetch the controls in Toolbox and place it to the Form window.

Step 5: After inserting the control write the coding to generate the Fibonacci series and find the sum of N numbers.

Step 6: To Run the Visual Basic program using F5 button or Click Start button.

Step 7: Stop and exit the program.

S.No	Object	Property	Setting
1.	Label	Name	Label 1
		Caption	Fibonacci Series and Sum of N numbers
2.	Label	Name	Label 2
		Caption	Enter the value of N
3.	Listbox	Name	Listbox1
4.	Command	Name	Fibonacci
		Caption	Fibonacci Series
5.	Command	Name	Sum of N num
		Caption	Sum of N numbers
6.	Text box	Name	InputNumber
		Text	

Form Design Window

Coding

```
Private Sub Fibonacci_Click()
Dim i, n, n1, n2, fib As Integer
n = Val(inputnumber.Text)
n1 = 0
n2 = 1
For i = 0 To n
List1.AddItem fib
fib = n1 + n2
n2 = n1
n1 = fib
Next i
End Sub
```

```
Private Sub Sum_Click()
Dim n, i, Sum As Integer
```

Sum = 0

n = Val(inputnumber.Text)

For i = 1 To n

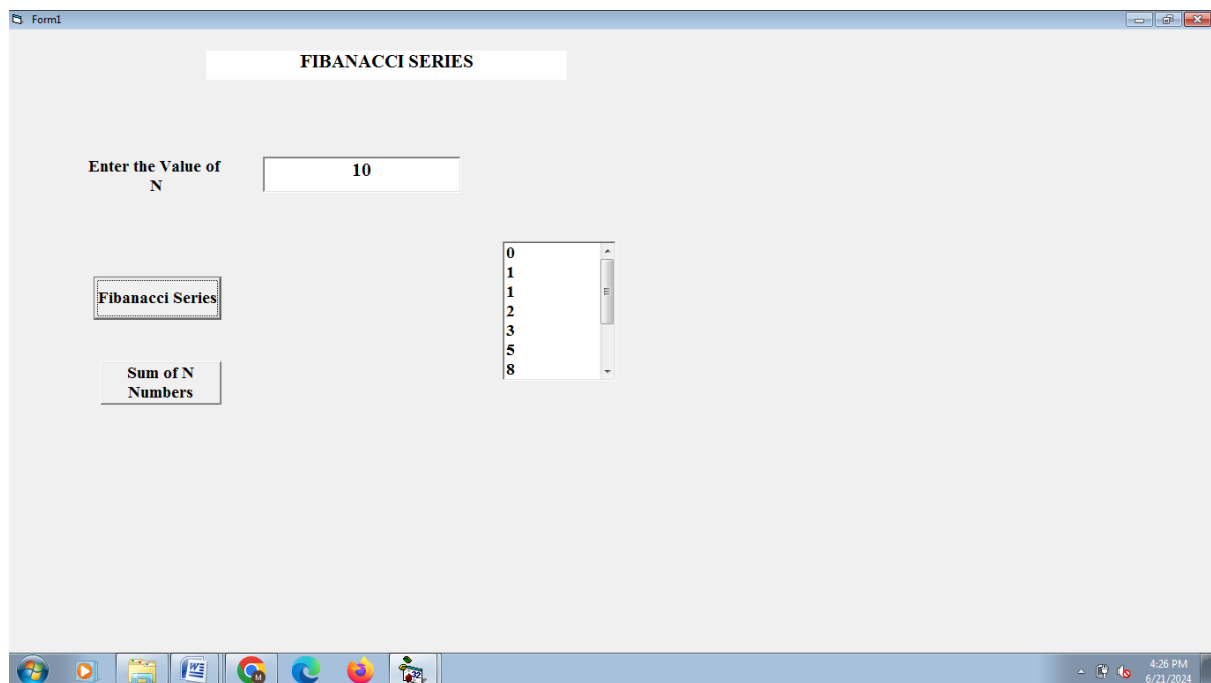
Sum = Sum + i

Next i

MsgBox ("The Sum of 1+2+...+" & n & " is " & Sum)

End Sub

Output



Form1

FIBANACCI SERIES

Enter the Value of N

Fibonacci Series

Sum of N Numbers

3

5

8

13

21

34

55

4:26 PM 6/21/2024

Form1

FIBANACCI SERIES

Enter the Value of N

Fibonacci Series

Sum of N Numbers

3

5

8

13

21

34

55

ProjectFib

The Sum of 1+2+...+10 is 55

OK

4:29 PM 6/21/2024

ANIMATION USING TIMER

AIM

To write a program to implement animation using timers.

ALGORITHM

STEP-1: Start → All programs → Visual Basic 6.0(displays New (project dialog box)

STEP-2: Select Standard EXE from New project dialog box and click ok button.

STEP-3: New Project opens with the name project1.

STEP-4: Add one image control, Two command buttons and a Timer control.

STEP-5: Change the properties as given below.

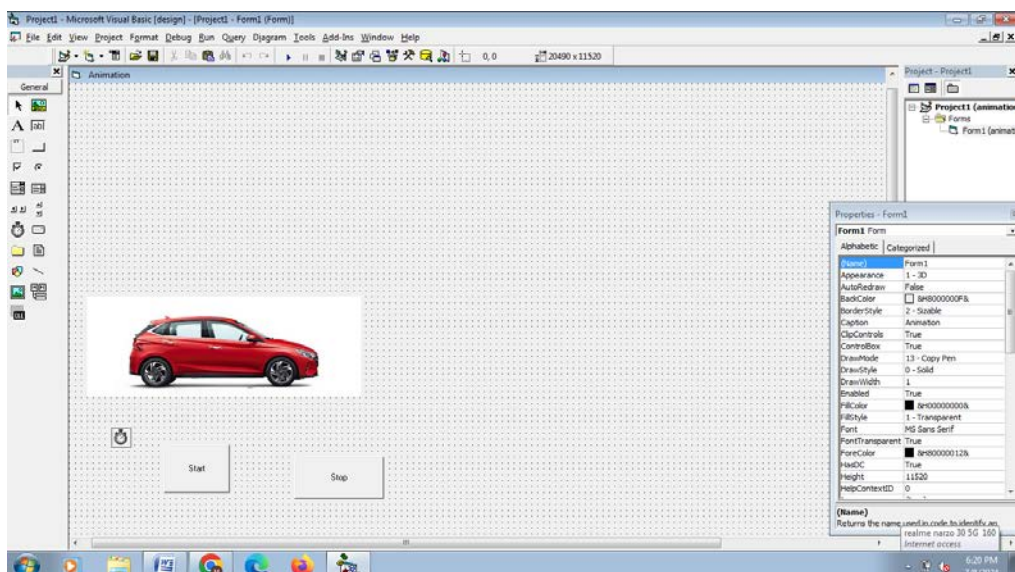
Object	Property	Setting
Form1	Name	Form1
	Caption	Animation
Image	Name	Image1
	Picture	Add image
Command button 1	Name	CmdStart
	Caption	Start
Command button 2	Name	CmdStop
	Caption	Stop
Timer	Name	Timer1
	Interval	100

Step 6: Double click the form to go to Code Window

Step7: Add the following code in the respective event procedure.

Step8: Run the form by clicking Run button on the Standard Toolbar or by pressing 'F5' key.

Form Design



Coding

```
Private Sub Form_Load()
```

```
Timer1.Enabled = False
```

```
End Sub
```

```
Private Sub Timer1_Timer()
```

```
Image1.Left = Image1.Left + 150
```

```
If Image1.Left > 14000 Then
```

```
Image1.Left = 0
```

```
End If
```

```
End Sub
```

```
Private Sub CmdStart_Click()
```

```
Timer1.Enabled = True
```

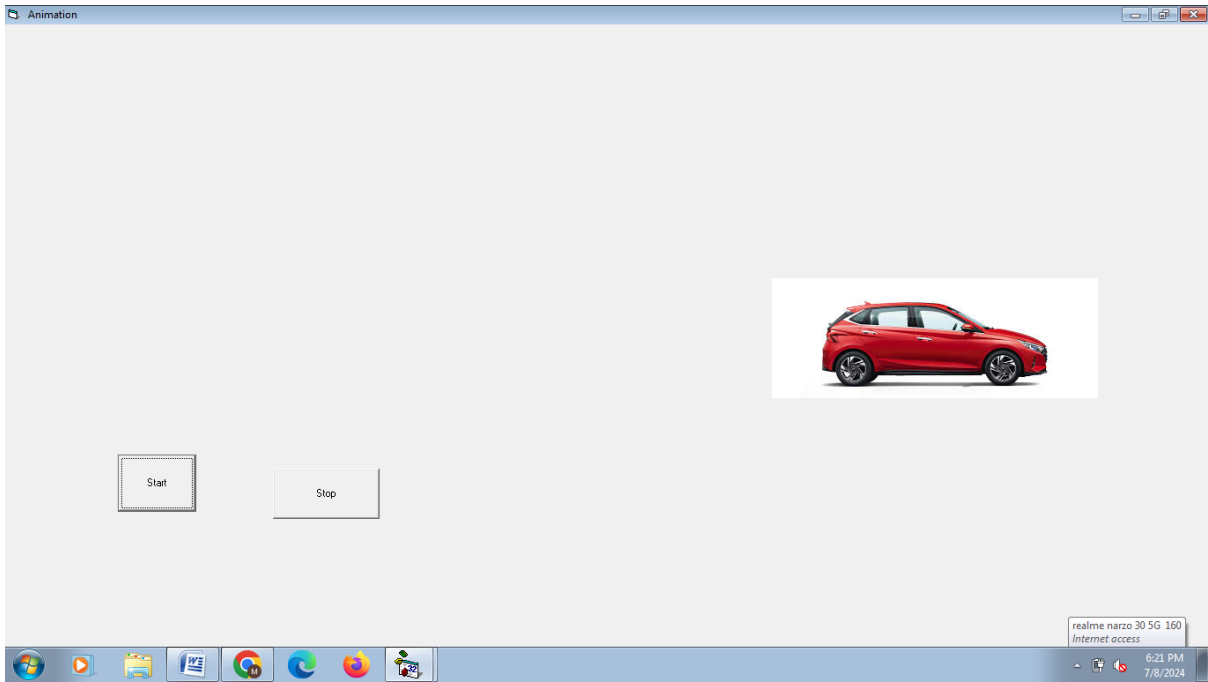
```
End Sub
```

```
Private Sub CmdStop_Click()
```

```
Timer1.Enabled = False
```

```
End Sub
```

Output



NUMBER CONVERSION

AIM

To create a simple VB program to accept a number as input and convert them into
1. Binary 2. Octal 3. Hexa-decimal

ALGORITHM

Step 1: Start → All Programs → Visual Basic 6.0 (displays New Project dialog box)

Step2: Select Standard EXE from New Project dialog box and click OK button.

Step3: New project opens with the name Project 1.

Step4: In Form window add one Frame control, three label controls, 2 text box controls and 5 command buttons.

Step 5: Change the properties as given below:

Object	Property	Setting
Form1	Name	Form1
	Caption	Number Conversion
Frame1	Caption	Decimal
Label1	Caption	Number Conversion
Label2	Caption	Enter Decimal Number
Label3	Caption	Result
Text1	Name	txtInput
	Text	<blank>
Text2	Name	txtOutput
	Text	<blank>
Command Button1	Caption	Binary
	Name	cmdBin
Command Button2	Caption	Octal
	Name	cmdOct
Command Button3	Caption	Hexa
	Name	cmdHexa
Command Button4	Caption	Clear
	Name	cmdClear

Command Button5	Caption	Exit
	Name	cmdExit

Step 6: Double click the form to go to Code Window

Step7: Add the following code in the respective event procedure.

Step8: Run the form by clicking Run button on the Standard Toolbar or by pressing 'F5' key.

FORM DESIGN

Coding

```
Private Sub CmdBin_Click()
```

```
Dim a, r As Single
```

```
a = Val(Text1.Text)
```

```
While (a > 1)
```

```
    r = a Mod 2
```

```
    Text2.Text = r & Text2.Text
```

```
    a = a / 2
```

```
End While
```

Wend

Text2.Text = a & Text2.Text

End Sub

Private Sub CmdOct_Click()

Text2.Text = ""

Text2.Text = Oct(Text1.Text)

End Sub

Private Sub CmdHex_Click()

Text2.Text = ""

Text2.Text = Hex(Text1.Text)

End Sub

Private Sub CmdClear_Click()

Text1.Text = Empty

Text2.Text = Empty

End Sub

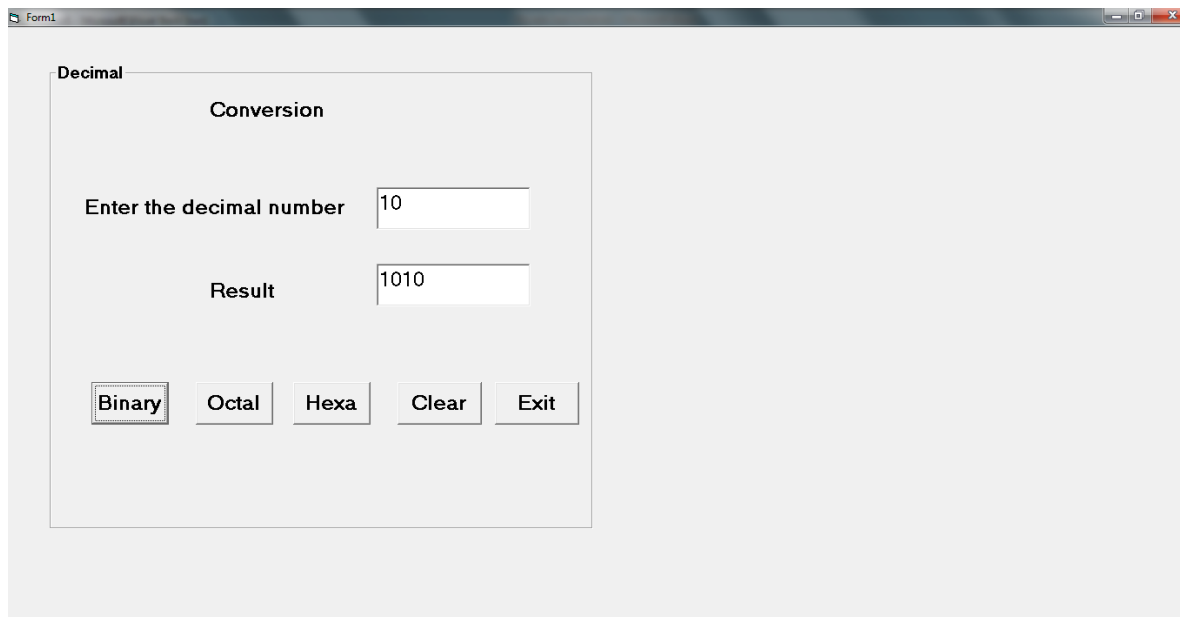
Private Sub CmdExit_Click()

End

End Sub

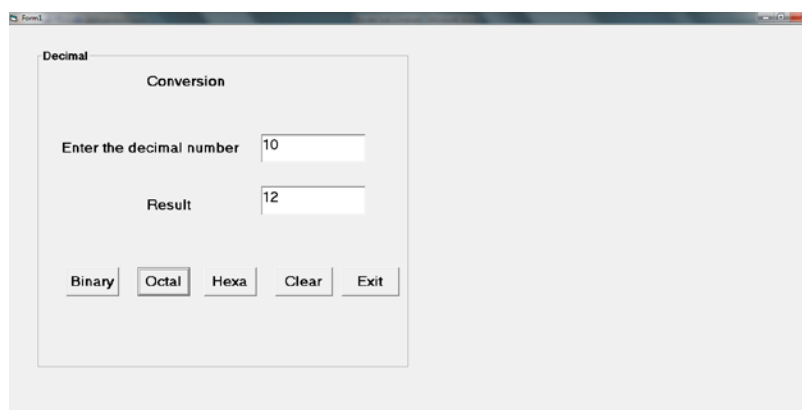
OUTPUT

Binary



The screenshot shows a Windows application window titled "Form1". Inside the window, there is a panel labeled "Decimal" which contains a "Conversion" section. This section has two text input fields: "Enter the decimal number" with the value "10" and "Result" with the value "1010". Below these fields are five buttons: "Binary", "Octal", "Hexa", "Clear", and "Exit". The "Binary" button is currently selected and highlighted with a dotted border.

Octal



This screenshot shows the same "Form1" application window. In this state, the "Octal" button is selected and highlighted with a dotted border. The "Enter the decimal number" field still contains "10", but the "Result" field now displays "12". The other buttons ("Binary", "Hexa", "Clear", "Exit") are no longer highlighted.

Hexa-decimal

Form1

Decimal

Conversion

Enter the decimal number 10

Result A

Binary Octal **Hexa** Clear Exit

MENU DRIVEN USING MDI FORM

AIM

To create a simple VB program to develop the menu driven program.

ALGORITHM

Step 1: Start → All Programs → Visual Basic 6.0 (displays New Project dialog box)

Step2: Select Standard EXE from New Project dialog box and click OK button.

Step3: New project opens with the name Project 1.

Step4: Select Project → Add MDI Form, to add MDI form.

Step5: Select Project → Add Form to add a new form. Likewise add 3 ordinary forms in the project.

Step 5: Change the properties as given below:

Object	Property	Setting
Form1	Name	Form1
	Caption	Form1
	MDIChild	True
Form2	Name	Form2
	Caption	Form2
	MDIChild	True
Form3	Name	Form3
	Caption	Form3
	MDIChild	True

Step 5: Add Menu items in the MDI form as given below by selecting Tools → Menu Editor

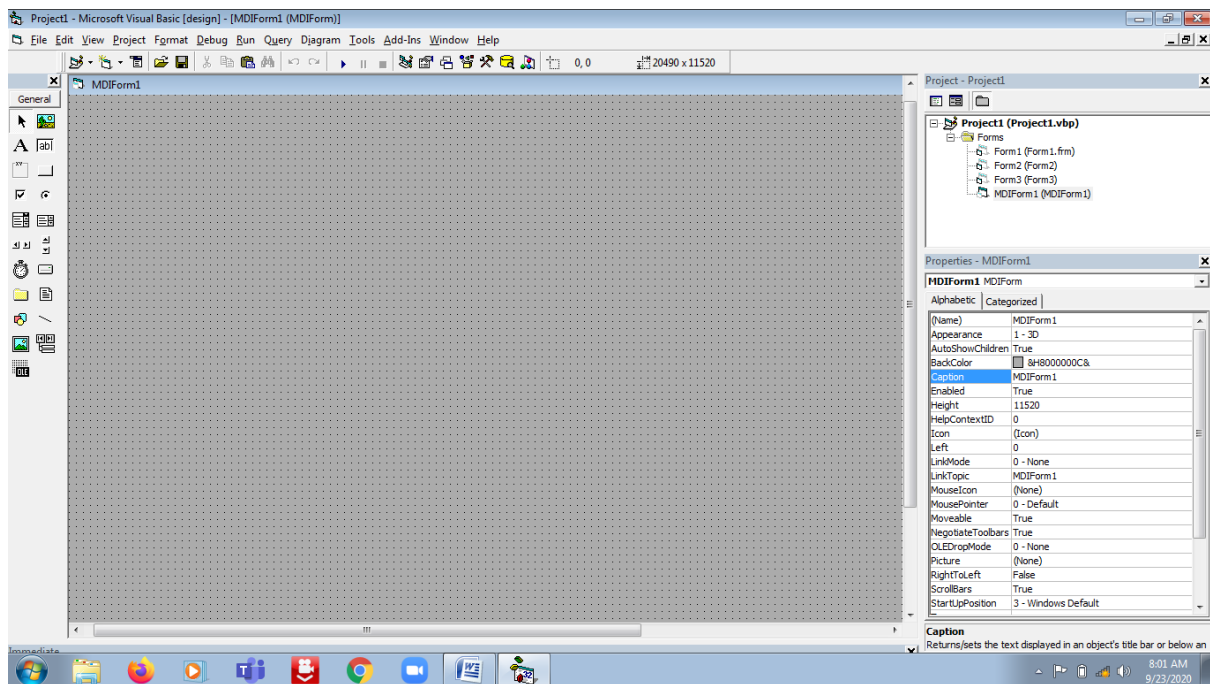
Menus → Submenus ↓	Window	Color	Exit End
	Show Form1 Form2 Form3	Red	
	Cascade	Green	
	Horizontal	Blue	
	Vertical		

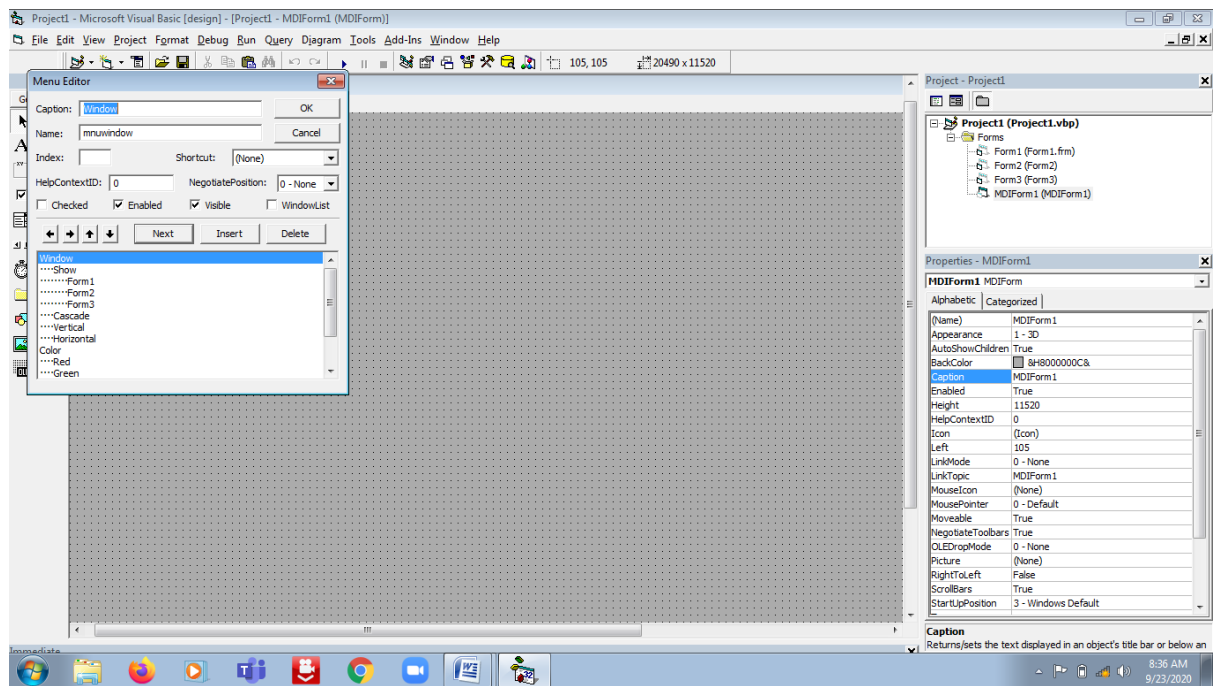
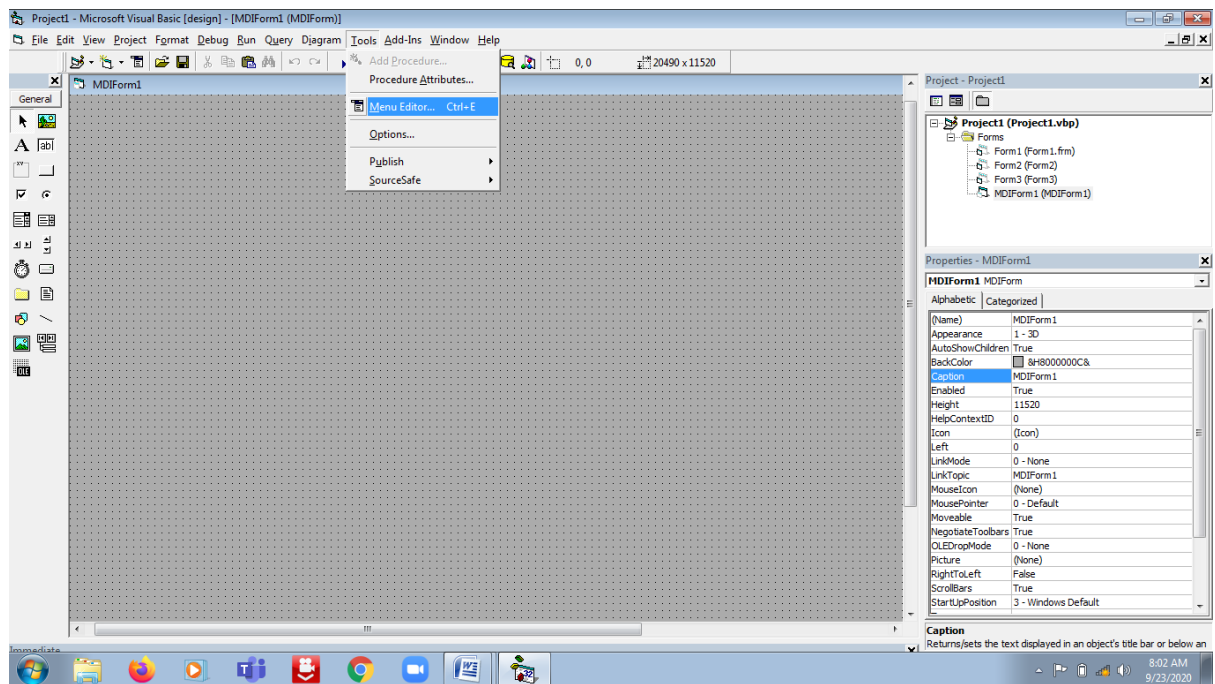
Step 6: Click on the menu item in the MDI form to add code.

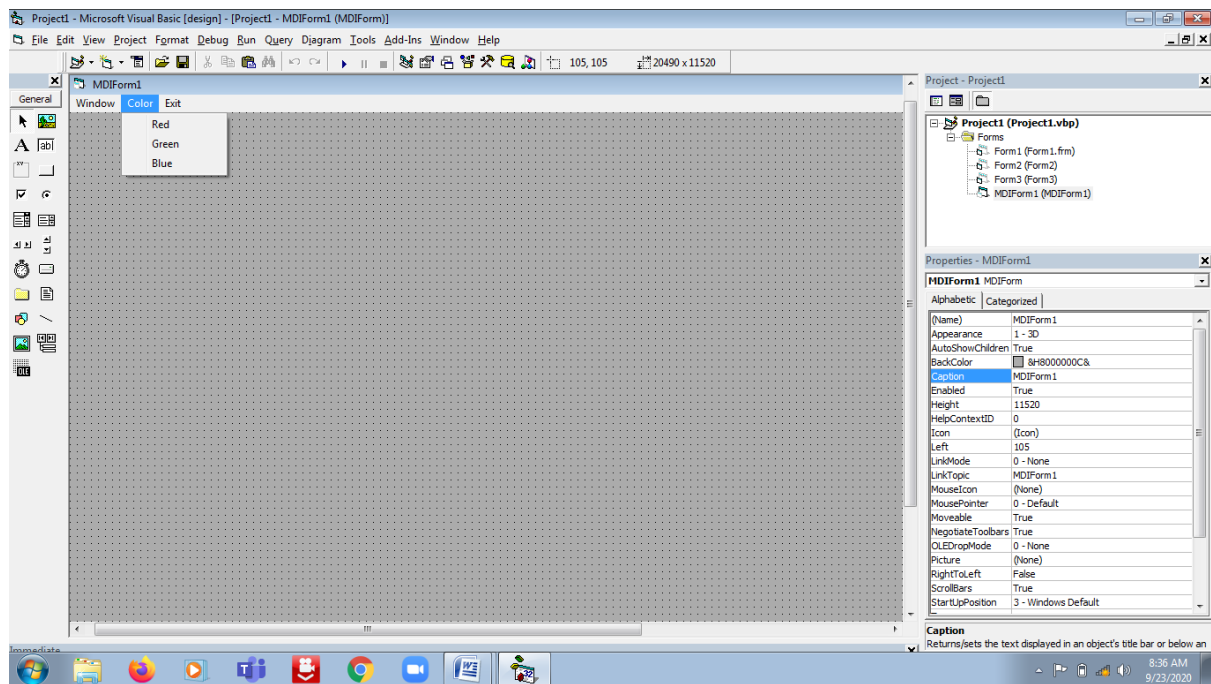
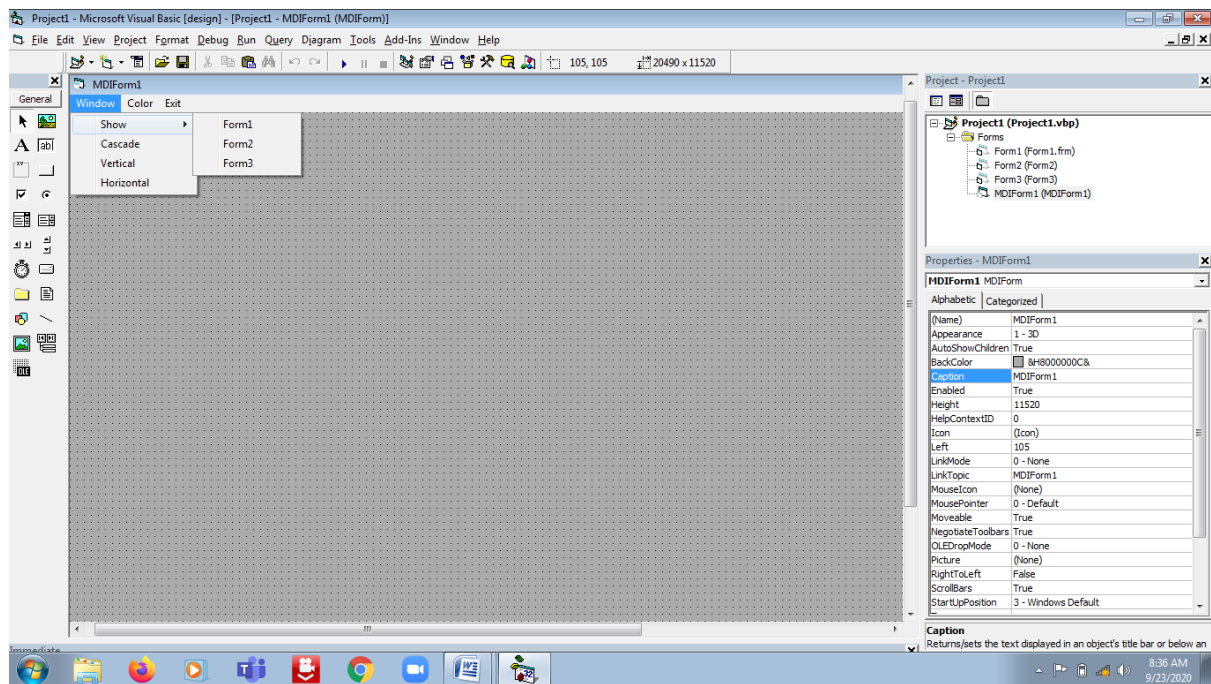
Step7: Add the following code in the respective menu item event procedure.

Step8: Run the form by clicking Run button on the Standard Toolbar or by pressing 'F5' key.

FORM DESIGN







```
Private Sub mnubblue_Click()
```

```
MDIForm1.ActiveForm.BackColor = vbBlue
```

```
End Sub
```

```
Private Sub mnucascade_Click()
```

```
MDIForm1.Arrange vbCascade
```


End Sub

Private Sub mnuend_Click()

End

End Sub

Private Sub mnuform1_Click()

Form1.Show

End Sub

Private Sub mnuform2_Click()

Form2.Show

End Sub

Private Sub mnuform3_Click()

Form3.Show

End Sub

Private Sub mnugreen_Click()

MDIForm1.ActiveForm.BackColor = vbGreen

End Sub

Private Sub mnuhorizontal_Click()

MDIForm1.Arrange vbTileHorizontal

End Sub

Private Sub mnured_Click()

MDIForm1.ActiveForm.BackColor = vbRed

End Sub

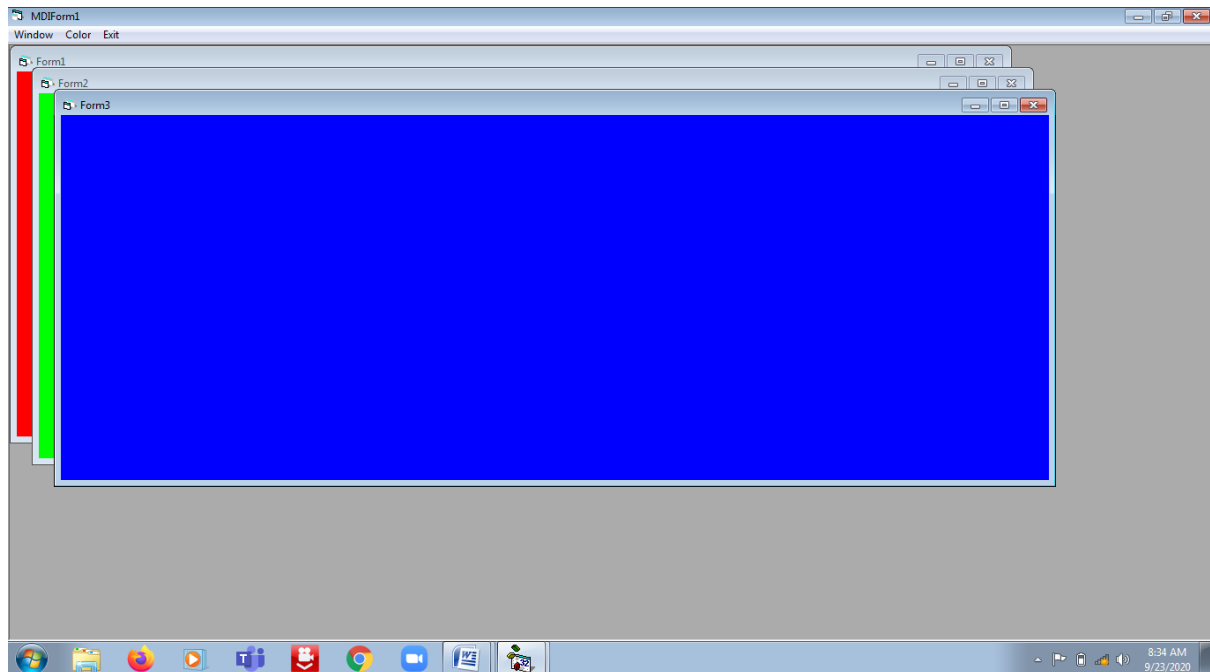
Private Sub mnuvertical_Click()

MDIForm1.Arrange vbVertical

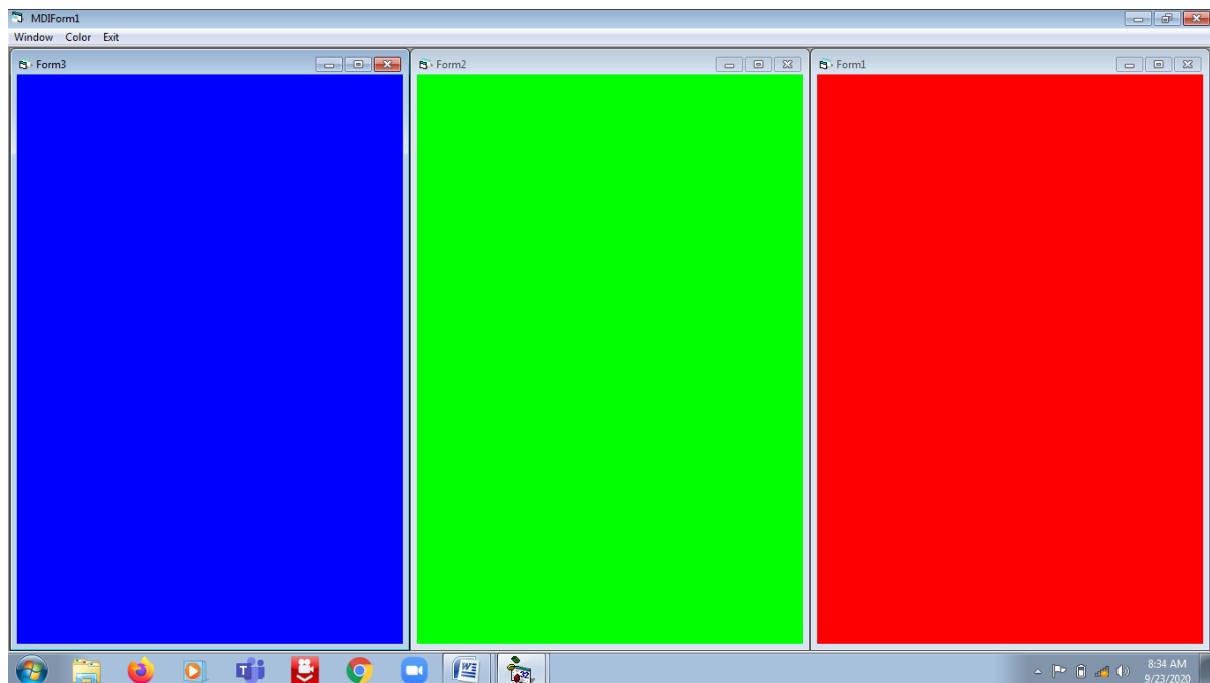
End Sub

OUTPUT

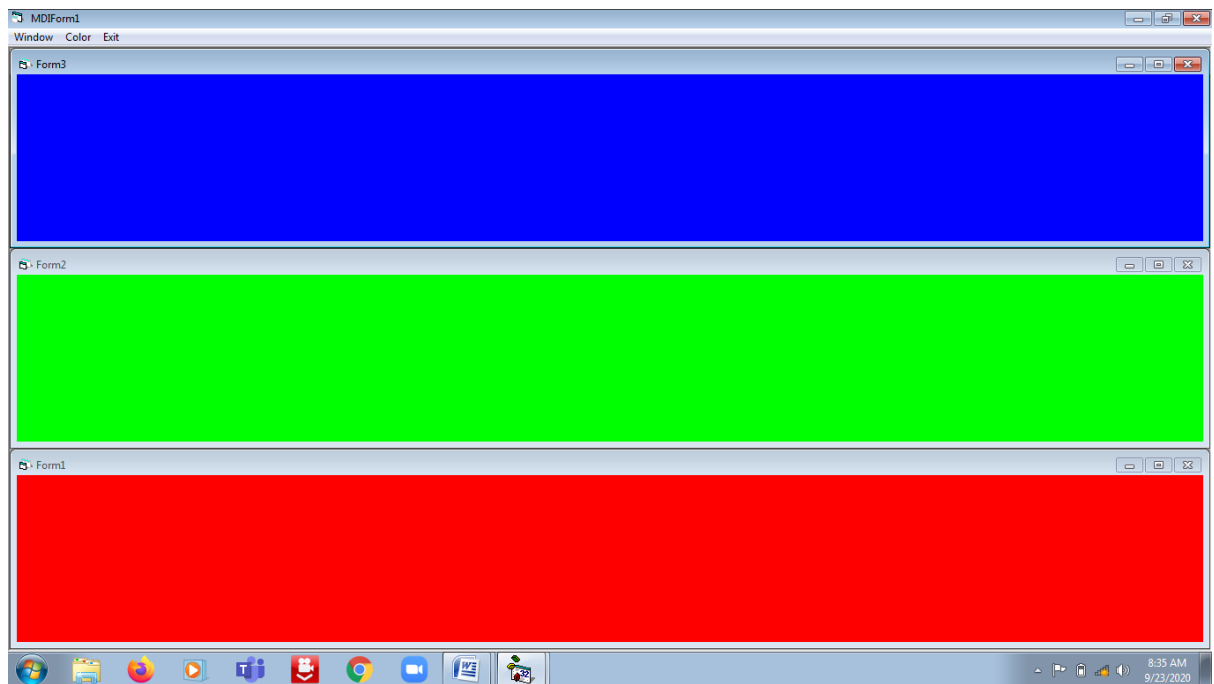
Cascade



Vertical



Horizontal



DRIVE LIST BOX, DIRECTORY LIST BOX, FILE LIST BOX

AIM

To create a simple VB program with drive list box ,directory list box and file list box to open , exit and save files using rich text box.

ALGORITHM

STEP-1: Start → All programs → Visual Basic 6.0(displays New project dialog box)

STEP-2: Select Standard EXE from New project dialog box and click ok button.

STEP-3: New Project opens with the name project1.

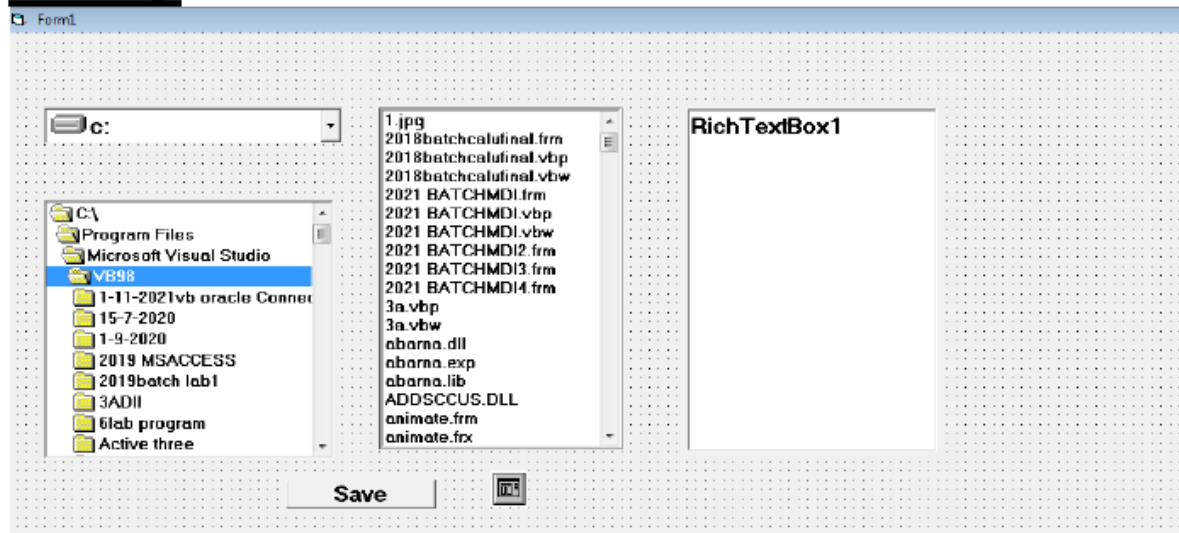
STEP-4: Add drive, dir and file listbox control.

STEP-5: To add rich textbox in Toolbox select project→components from the dialog box selected Microsoft Rich Textbox control 6.0 and click Ok. Add Rich text box control, one command button in the form window.

STEP-6: Change the properties as given below.

Object	Property	Setting
Form1	Name	Form1
	Caption	Drive list box, Directory list box, File list box
Drive list box	Name	Drive list box1
Directory List box	Name	Directory list box1
File list box	Name	File list box1
RichTextBox	Name	RichTextBox1
	Text	<blank>
Common Dialog control	Name	Common Dialog1
Command Button1	Name	cmdSave
	Caption	Save
Command Button1	Name	cmdExit
	Caption	Exit

Form Design



Coding

```
Dim filename As String
```

```
Private Sub cmdSave_Click()
```

```
CommonDialog1.ShowSave
```

```
FileName = CommonDialog1.FileName
```

```
RichTextBox1.SaveFile FileName, rtfText
```

```
End Sub
```

```
Private Sub Dir1_Change()
```

```
File1.Path = Dir1.Path
```

```
End Sub
```

```
Private Sub Drive1_Change()
```

```
Dir1.Path = Drive1.Drive
```

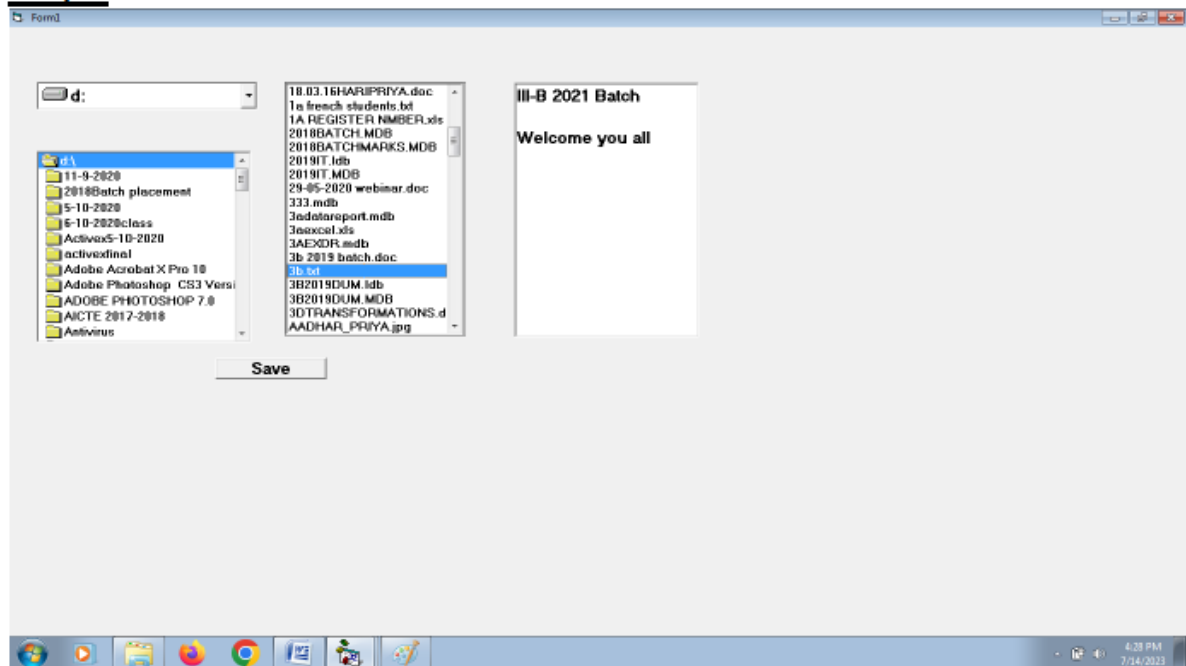
```
End Sub
```

```
Private Sub File1_Click()
```

```
RichTextBox1.FileName = File1.Path & "\" & File1.FileName
```

```
End Sub
```

Output



COMMON DIALOG CONTROL

AIM

To design a Visual Basic Program to illustrate Common Dialog Control and to open, edit and save text file.

ALGORITHM:

Step 1: Start → All Programs → Visual Basic 6.0 (displays New Project dialog box)

Step2: Select Standard EXE from New Project dialog box and click OK button.

Step3: New project opens with the name Project 1.

Step4: In the Form window add following controls and change the properties given below.

Step 5: Add Common Dialog Control in form. (By default this control will not be available in the Toolbox. To add this control in tool box Select Project → Components. From the Components dialog box displayed, select the option Microsoft Common Dialog Control 6.0 and turn on the check box)

Step 6: Add Rich Text Box Control in form. (By default this control will not be available in the Toolbox. To add this control in tool box Select Project → Components. From the Components dialog box displayed, select the option Microsoft RichTextBox Control 6.0 and turn on the check box)

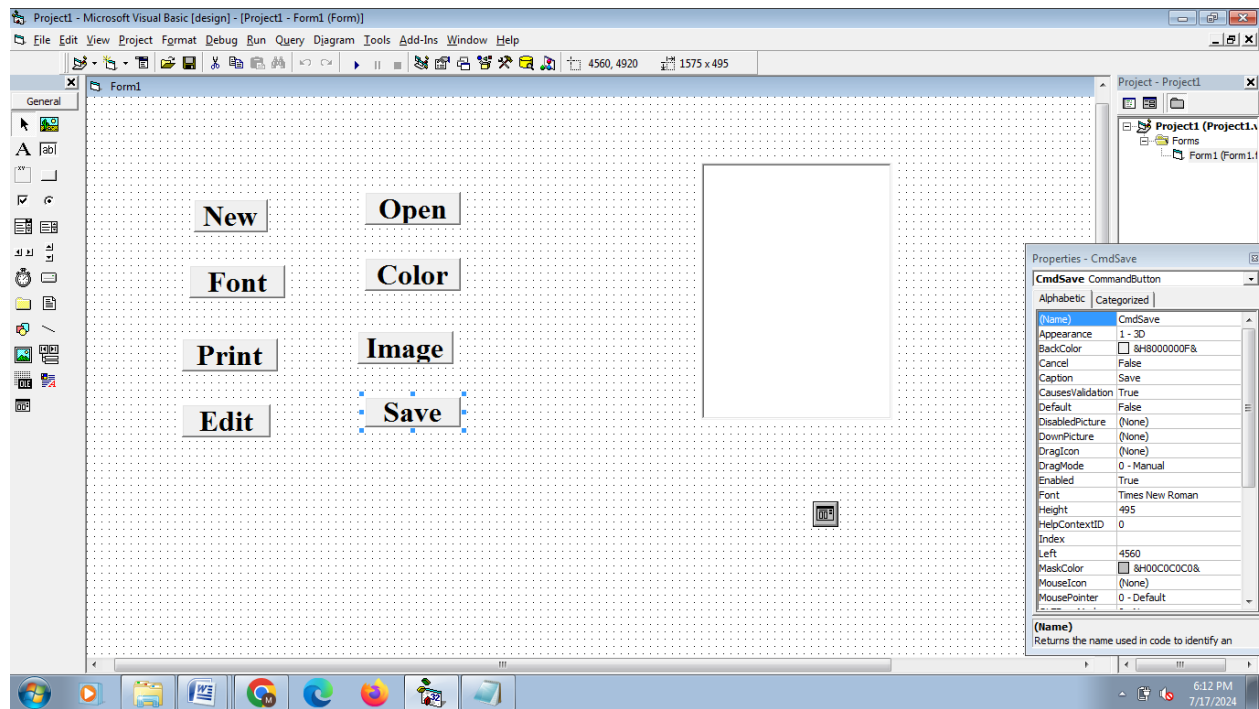
Object	Property	Setting
Form1	Name	Form1
	Caption	Common Dialog Control
CommonDialog1	Name	CommonDialog1
RichTextBox1	Name	RichTextBox1
	Text	Blank
Command button 1	Name	CmdNew
	Caption	New
Command button 2	Name	CmdOpen
	Caption	Open
Command button 3	Name	CmdFont
	Caption	Font
Command button 4	Name	CmdColor
	Caption	Color
Command button 5	Name	CmdPrint

	Caption	Print
Command button 6	Name	CmdImage
	Caption	Image
Command button 7	Name	CmdEdit
	Caption	Edit
Command button 8	Name	CmdSave
	Caption	Save

Step7: Add the following code in the respective event procedure.

Step8: Run the form by clicking Run button on the Standard Toolbar or by pressing 'F5' key.

FORM DESIGN:



Coding

Private Sub CmdNew_Click()

RichTextBox1.Text = ""

RichTextBox1.BackColor = &HFFFFFF

End Sub

Private Sub CmdOpen_Click()

CommonDialog1.ShowOpen

RichTextBox1.LoadFile CommonDialog1.FileName

End Sub

Private Sub CmdFont_Click()

CommonDialog1.Flags = &H3 Or &H100

CommonDialog1.ShowFont

RichTextBox1.SelBold = CommonDialog1.FontBold

RichTextBox1.SelColor = CommonDialog1.Color

RichTextBox1.SelUnderline = CommonDialog1.FontUnderline

RichTextBox1.SelFontName = CommonDialog1.FontName

RichTextBox1.SelFontSize = CommonDialog1.FontSize

RichTextBox1.SelItalic = CommonDialog1.FontItalic

RichTextBox1.SelStrikeThru = CommonDialog1.FontStrikethru

End Sub

Private Sub Cmdcolor_Click()

CommonDialog1.ShowColor

RichTextBox1.BackColor = CommonDialog1.Color

End Sub

Private Sub CmdPrint_Click()

RichTextBox1.SelPrint Printer.hDC

'Print dialog box is Run only printer is available

End Sub

Private Sub CmdImage_Click()

CommonDialog1.ShowOpen


```
RichTextBox1.OLEObjects.Add , , CommonDialog1.FileName
```

End Sub

Private Sub CmdEdit_Click()

```
RichTextBox1.SetFocus
```

End Sub

Private Sub CmdSave_Click()

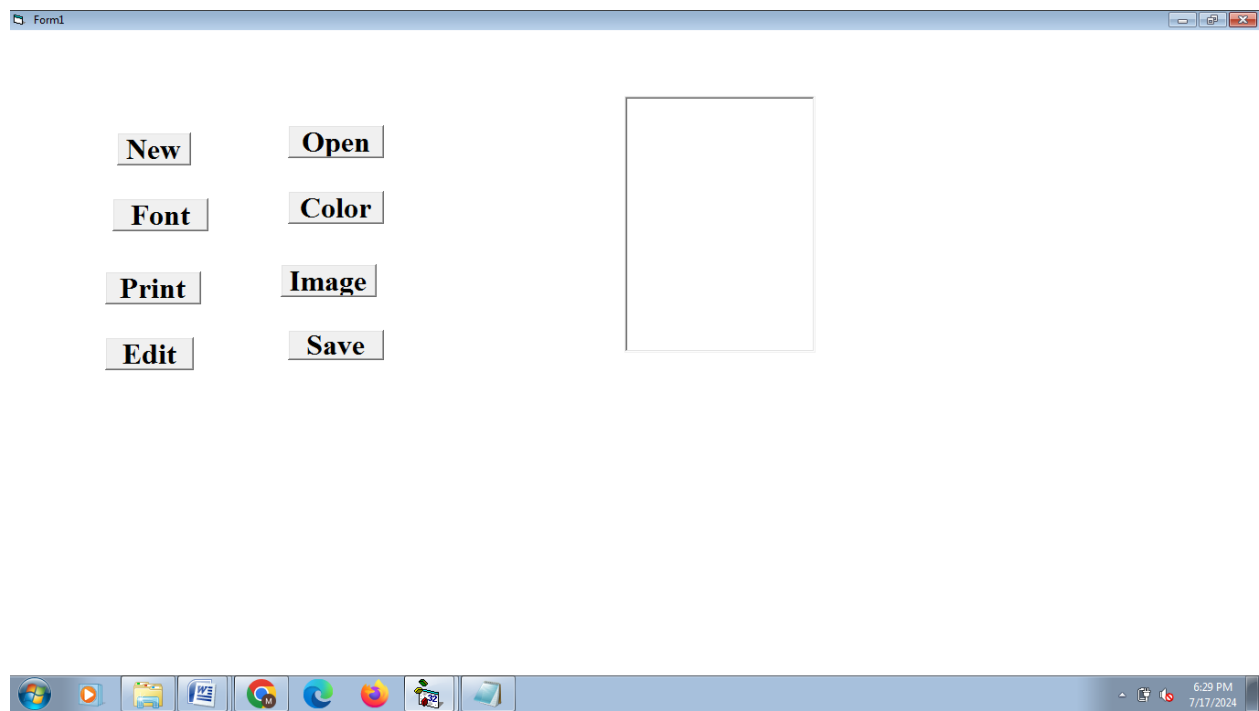
```
CommonDialog1.ShowSave
```

```
RichTextBox1.SaveFile CommonDialog1.FileName
```

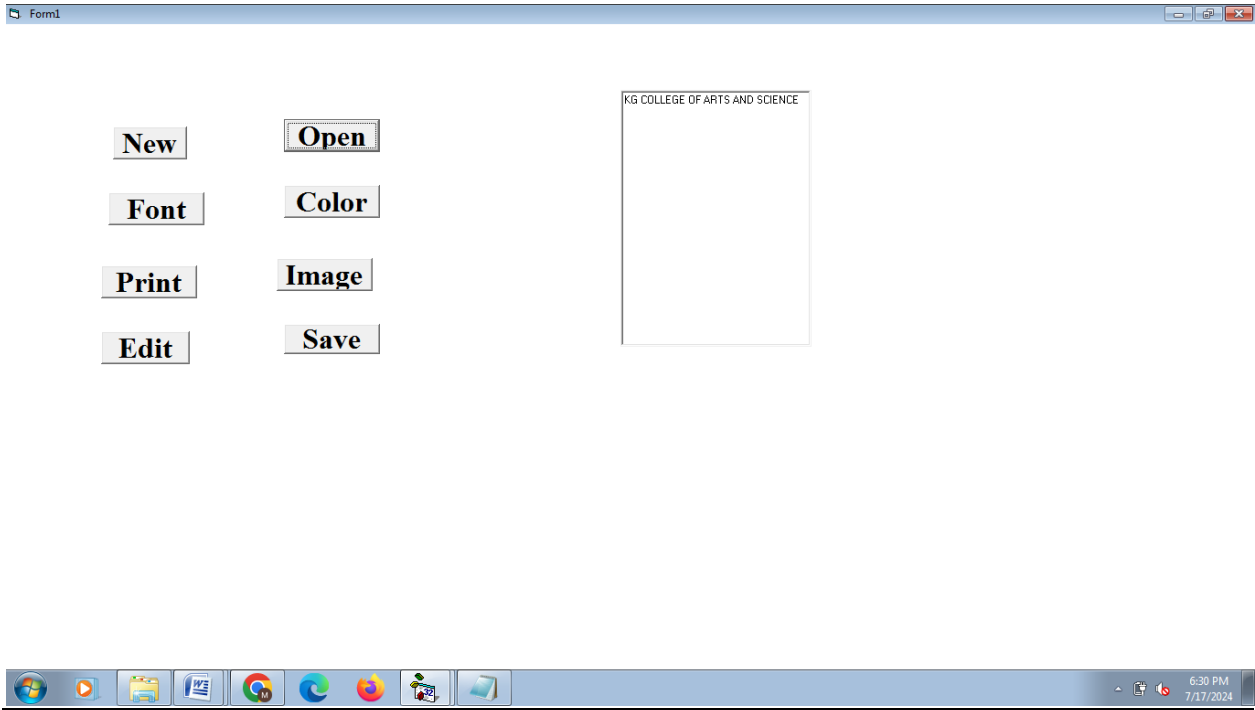
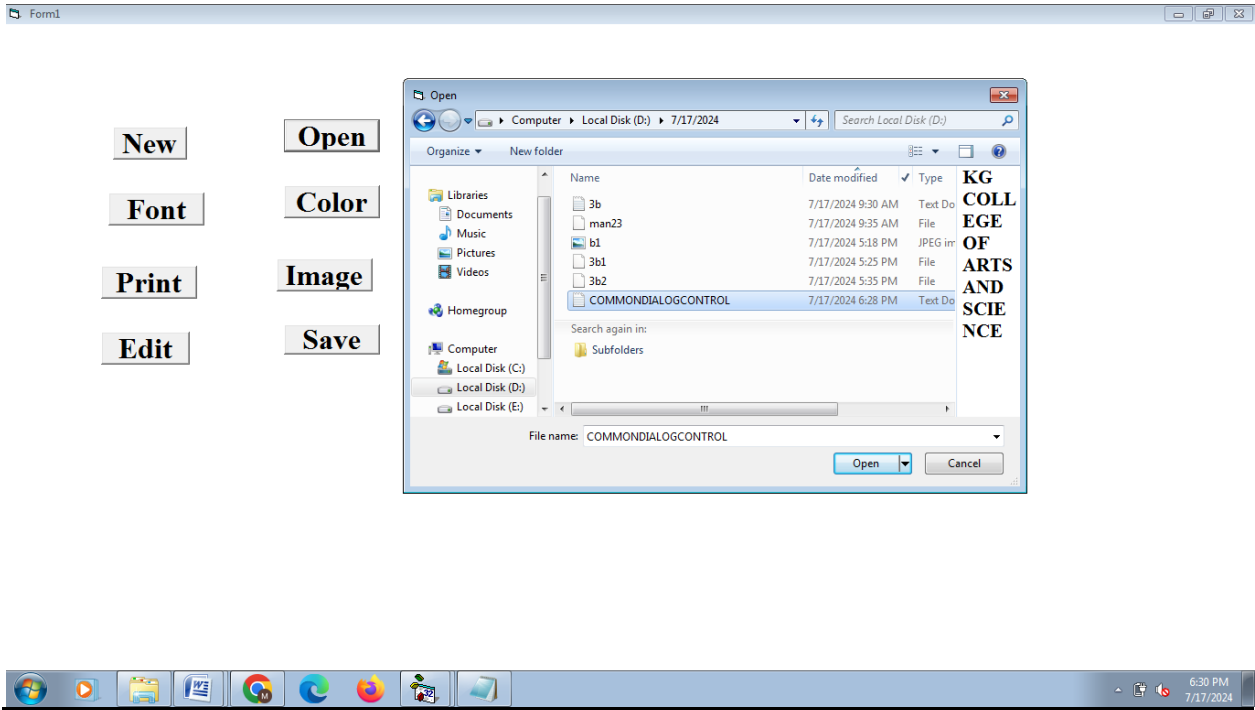
End Sub

Outputs

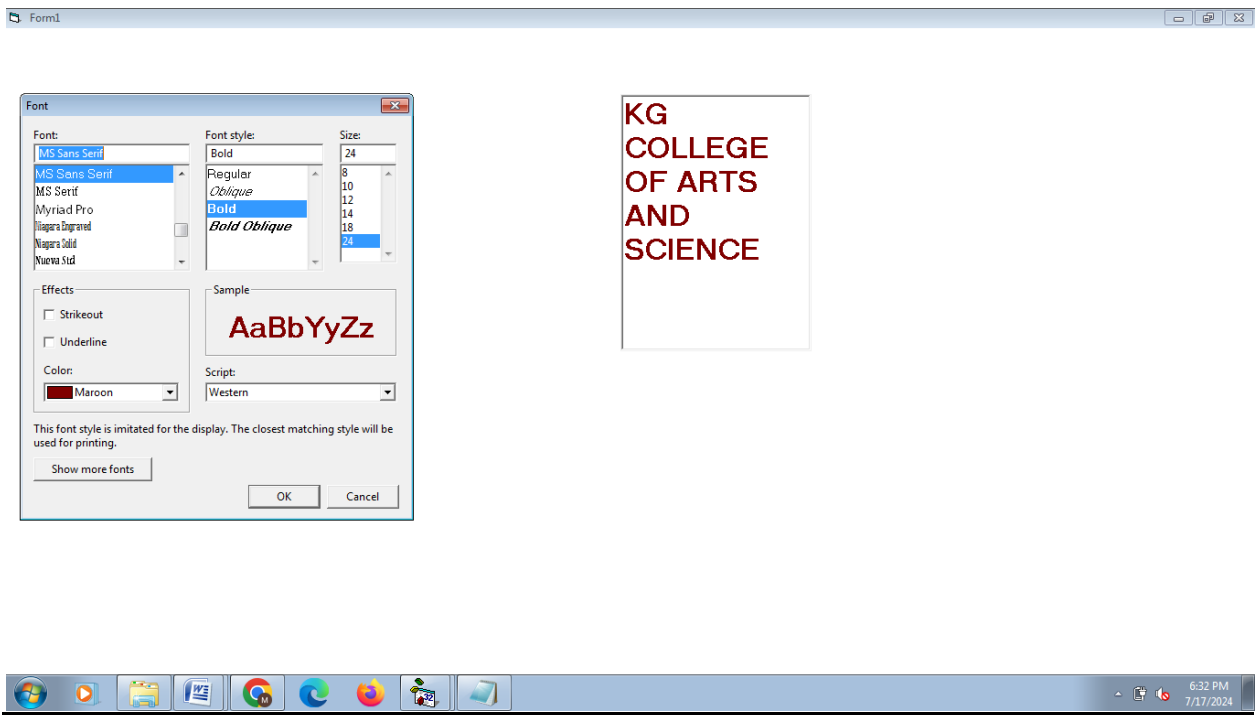
New



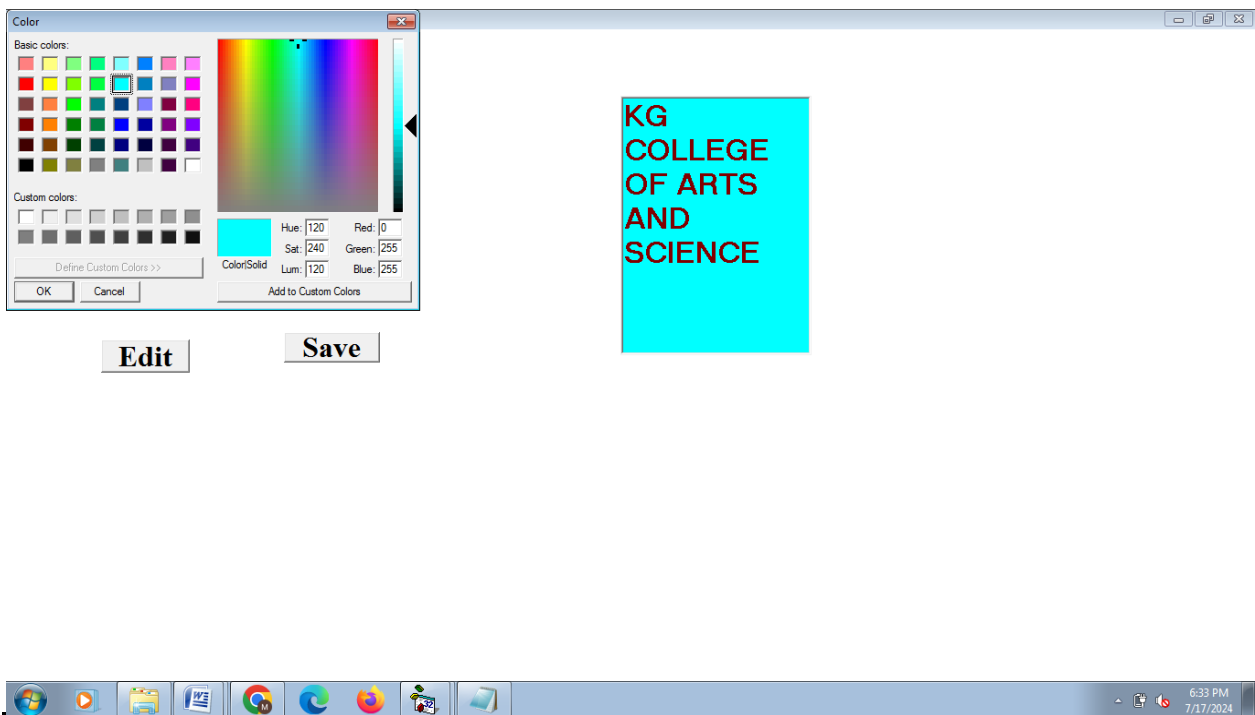
Open



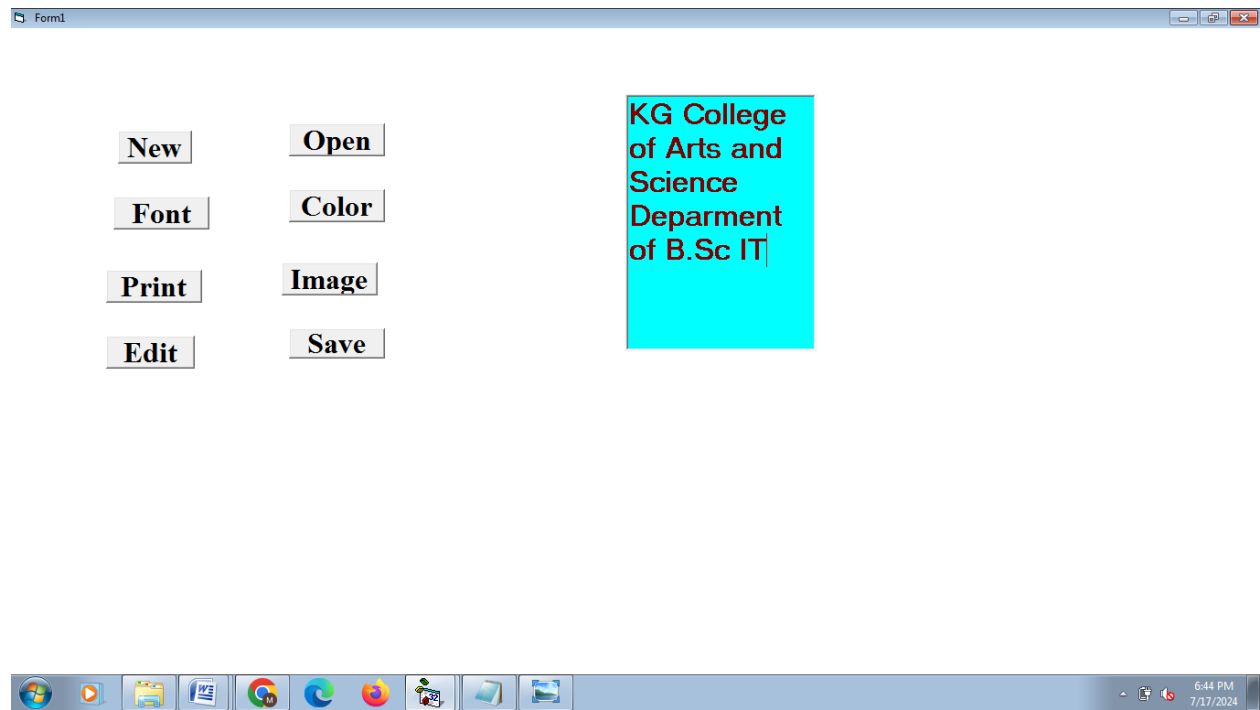
Font



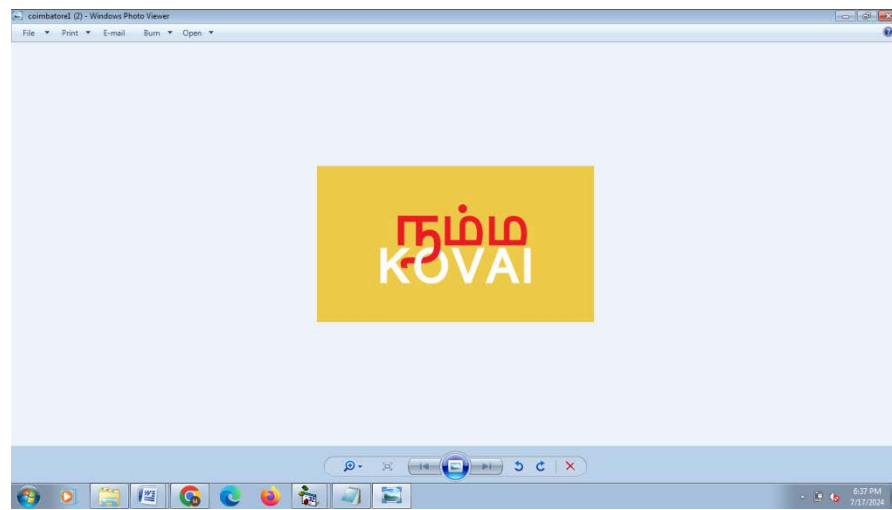
Color



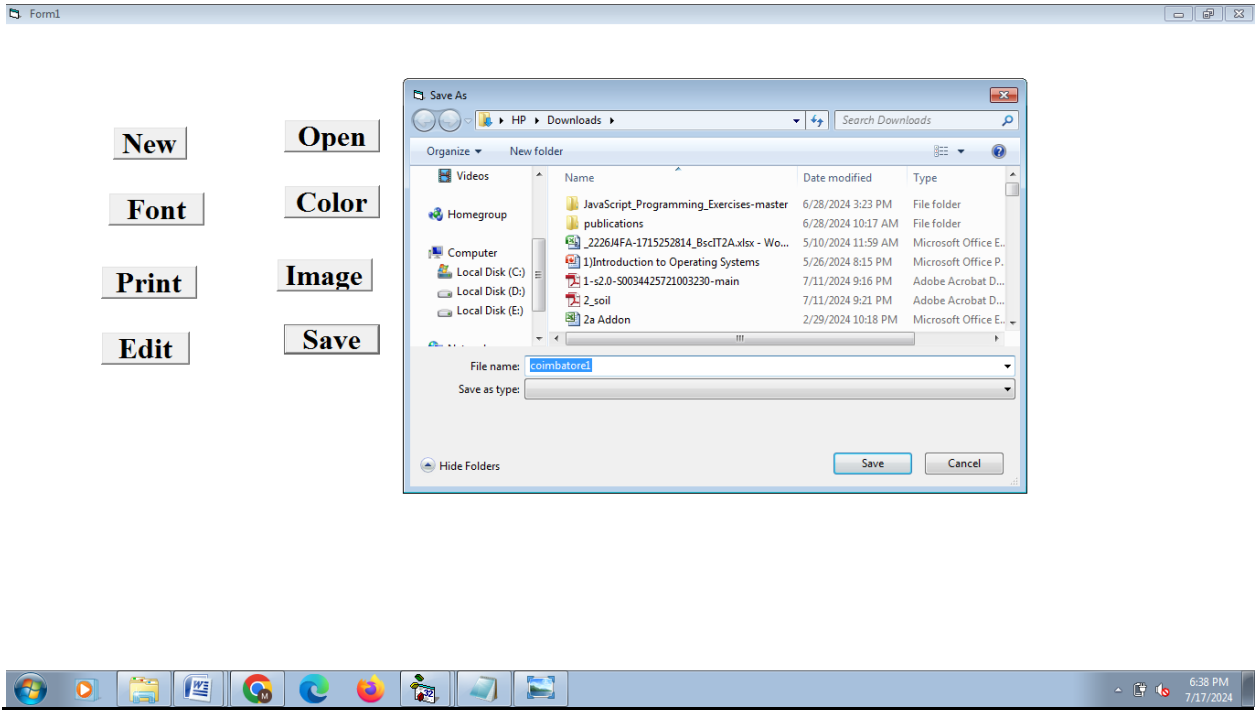
Edit



Image



Save



AIM:

To create a simple Visual Basic program to design a Calculator with basic operation.

ALGORITHM:

Step 1: Start → All Programs→ Visual Basic 6.0 (displays New Project dialog box)

Step2: Select Standard EXE from New Project dialog box and click OK button.

Step3: In Form window add one Frame control

Step4: Create a control Array, use copy and paste, add 10 command buttons for digits 0 to 9.

Step 5: Change the properties as given below:

Object	Property	Setting
Form1	Name	Form1
	Caption	Simple Calculator
Frame1	Caption	Simple Calculator
Text1	Name	TxtInput
	Text	<blank>
Command Buttons1(Control Array)	Name	cmdNumber
	Caption	0 – 9 (Control Array)
Command Button	Name	cmdAdd
	Caption	+
Command Button	Name	cmdSub
	Caption	-

Command Button	Name	cmdMul
	Caption	*
Command Button	Name	cmdDiv
	Caption	/
Command Button	Name	cmdMod
	Caption	%
Command Button	Name	cmdClear
	Caption	C

Option Explicit

Dim var1, var2 As Double

Dim opern As String

Private Sub Command1_Click(Index As Integer)

Text1.Text = Text1.Text + Command1(Index).Caption

End Sub

Private Sub Command2_Click()

var1 = Val(Text1.Text)

opern = "+"

Text1.Text = ""

End Sub

Private Sub Command3_Click()

var1 = Val(Text1.Text)

opern = "-"

Text1.Text = ""

End Sub

Private Sub Command4_Click()

var1 = Val(Text1.Text)

opern = "*"


```
Text1.Text = ""
```

```
End Sub
```

```
Private Sub Command5_Click()
```

```
var1 = Val(Text1.Text)
```

```
opern = "/"
```

```
Text1.Text = ""
```

```
End Sub
```

```
Private Sub Command6_Click()
```

```
Text1.Text = Text1.Text + "."
```

```
End Sub
```

```
Private Sub Command7_Click()
```

```
var2 = Val(Text1.Text)
```

```
Select Case opern
```

```
Case "+":
```

```
Text1.Text = var1 + var2
```

```
Case "-":
```

```
Text1.Text = var1 - var2
```

```
Case "*":
```

```
Text1.Text = var1 * var2
```

```
Case "/":
```

```
Text1.Text = var1 / var2
```

Case "% ":

Text1.Text = var1 * (1 / 100)

End Select

End Sub

Private Sub Command8_Click()

var1 = Val(Text1.Text)

opern = "% "

Text1.Text = ""

End Sub

Private Sub Command9_Click()

Text.Text = ""

End Sub