

## Draw a Basic Line Program

### The Form

The form is titled "Line Input" and contains two sections for entering coordinates. The first section is labeled "Enter the X, Y and Z coordinates for the start of the line." and has three text boxes for X, Y, and Z. The second section is labeled "Enter the X, Y and Z coordinates for the end of the line." and also has three text boxes for X, Y, and Z. Below the text boxes are three buttons: "Draw Line", "Clear Form", and "Exit".

### The Instructions

Under the General Declarations section of the code, write the subroutine `CreateLine`.

Add the code to the `cmdClear` subroutine.

Add the code to the `cmdExit` subroutine.

Add the code `CreateLine` to the `cmdDrawLine` subroutine.

Go to Insert Module and type:

```
Sub DrawLine ()  
    FrmLineInput.Show  
End Sub
```

### The Code

```
Sub CreateLine()  
'define the starting and ending point  
arrays  
    Dim startpoint(0 To 2) As Double  
    Dim Endpoint(0 To 2) As Double  
'let the point positions 0 1 and 2  
accept data from the textboxes  
    startpoint(0) = txtStartpointX  
    startpoint(1) = txtStartpointY  
    startpoint(2) = txtStartpointZ  
    Endpoint(0) = txtEndpointX  
    Endpoint(1) = txtEndpointY  
    Endpoint(2) = txtEndpointZ  
'Execute the line  
    With ThisDrawing.ModelSpace  
        .AddLine startpoint, Endpoint  
        .Item(.Count - 1).Update  
    End With  
End Sub
```

```
Private Sub cmdClear_Click()  
'clear the form  
    txtStartpointX = ""  
    txtStartpointY = ""  
    txtStartpointZ = ""  
    txtEndpointX = ""  
    txtEndpointY = ""  
    txtEndpointZ = ""  
End Sub
```

```
Private Sub cmdDrawline_Click()  
'draw the line  
    CreateLine  
End Sub
```

```
Private Sub cmdExit_Click()  
'unload and end program  
    Unload Me  
End  
End Sub
```