

In Python, you can use if, else, and elif (short for "else if") statements to control the flow of your program based on different conditions. Here's a basic structure:

```
if condition1:
    # code to be executed if condition1 is True
elif condition2:
    # code to be executed if condition1 is False and condition2 is True
else:
    # code to be executed if both condition1 and condition2 are False
```

### Here's a simple example:

```
python

x = 10

if x > 0:
    print("x is positive")
elif x == 0:
    print("x is zero")
else:
    print("x is negative")
```

In this example, the program checks whether  $\overline{\mathbf{x}}$  is greater than 0, equal to 0, or less than 0, and prints a corresponding message based on the condition that evaluates to True.

You can have multiple elif statements to check for different conditions, and the else block is optional. The if, elif, and else blocks are determined by indentation in Python, so be sure to maintain consistent indentation levels for proper code structure.



### Code 1:

```
var1 = 6
var2 = 56
var3 = int(input("Enter No:"))
if var3 > var2:
   print("Greater")
elif var3==var2:
   print("Equal")
else:
   print ("Lesser")
list1 = [5,7,3]
if 15 not in list1:
   print("No its not in the list")
print("What is your age?")
age = int(input())
if age<18:
   print("You cannot drive")
elif age == 18:
   print("We will think about you")
else:
 print("you can drive")
```

## Output:

```
C:\Users\test\PycharmProjects\project_1\.venv\Scripts\python.exe C:\Users\test\PycharmProjects\project_1\Project_1.py
Enter No:21
Lesser
No its not in the list
What is your age?

11
You cannot drive
```



### **Calculator Updated Code with If-Else:**

```
print("*******Welcome in the world of
calculator*******
print("Enter you name: ")
name = str(input())
print("**** Welcome*****", name, "Enjoy the
calculator")
print("enter first no:")
c1 = int(input())
print("enter second no:")
c2 = int(input())
print("enter operator + - * /:")
c3 = input()
if c3 == '+':
    num = c1 + c2
   print("the sum result:", num)
elif c3 == '-':
    num = c1 - c2
   print("the subtract result:", num)
elif c3 == '*':
    num = c1 * c2
   print("the multiply result:", num)
elif c3 == '/':
   num = c1 / c2
   print("the divide result:", num)
else:
   print("you have selected the wrong
operator")
```



# Output:

```
C:\Users\test\PycharmProjects\project_1\.venv\Scripts\python.exe C:\Users\test\PycharmProjects\project_1\temp.py
***********************
Enter you name:
sam
***** Welcome***** sam Enjoy the calculator
enter first no:
21
enter second no:
21
enter operator + - * /:
+
the sum result: 42
```