A program for accepting a digit and display name

In [4]:
```
d=int(input("Enter a Digit:")) #0,1,2,3,4,5,6,7,8,9
if (d==0):
    print("{} is Zero".format(d))
if (d==1):
    print("{} is One".format(d))
if (d==2):
    print("{} is Two".format(d))
if (d==3):
    print("{} is Three".format(d))
if (d==4):
    print("{} is Four".format(d))
if (d==5):
    print("{} is Five".format(d))
if (d==6):
    print("{} is Six".format(d))
if (d==7):
    print("{} is Seven".format(d))
if (d==8):
    print("{} is Eight".format(d))
if (d==9):
    print("{} is Nine".format(d))
if (d==10):
    print("{} is Ten".format(d))
if d>9:
    print("{} is Number:".format(d))
if (d in [-1, -2, -3, -4, -5, -6, -7, -8, -9]):
    print("{} is -VE digit:".format(d))
if (d<0 and d not in [-1, -2, -3, -4, -5, -6, -7, -8, -9]):
    print("{} is -VE Number:".format(d))
print("Program excution completed")
```

```
-125 is -VE Number:
Program excution completed
```

In [6]:
```
d=int(input("Enter a Digit:")) #0,1,2,3,4,5,6,7,8,9
if (d==0):
    print("{} is Zero".format(d))
if (d==1):
    print("{} is One".format(d))
if (d==2):
    print("{} is Two".format(d))
if (d==3):
    print("{} is Three".format(d))
if (d==4):
    print("{} is Four".format(d))
if (d==5):
    print("{} is Five".format(d))
if (d==6):
    print("{} is Six".format(d))
if (d==7):
    print("{} is Seven".format(d))
if (d==8):
```

```
    print("{} is Eight".format(d))
if (d==9):
    print("{} is Nine".format(d))
if (d==10):
    print("{} is Ten".format(d))
if d>9:
    print("{} is Number:".format(d))
if (d in [-1, -2, -3, -4, -5, -6, -7, -8, -9]):
    print("{} is -VE digit:".format(d))
if (d<0 and d not in [-1, -2, -3, -4, -5, -6, -7, -8, -9]):
    print("{} is -VE Number:".format(d))
print("Program excution completed")
```

```
245 is Number:
Program excution completed
```

In [8]:
```
d=int(input("Enter a Digit:")) #0,1,2,3,4,5,6,7,8,9
if (d==0):
    print("{} is Zero".format(d))
if (d==1):
    print("{} is One".format(d))
if (d==2):
    print("{} is Two".format(d))
if (d==3):
    print("{} is Three".format(d))
if (d==4):
    print("{} is Four".format(d))
if (d==5):
    print("{} is Five".format(d))
if (d==6):
    print("{} is Six".format(d))
if (d==7):
    print("{} is Seven".format(d))
if (d==8):
    print("{} is Eight".format(d))
if (d==9):
    print("{} is Nine".format(d))
if (d==10):
    print("{} is Ten".format(d))
if d>9:
    print("{} is Number:".format(d))
if (d in [-1, -2, -3, -4, -5, -6, -7, -8, -9]):
    print("{} is -VE digit:".format(d))
if (d<0 and d not in [-1, -2, -3, -4, -5, -6, -7, -8, -9]):
    print("{} is -VE Number:".format(d))
print("Program excution completed")
```

```
5 is Five
Program excution completed
```

If else Statement

Check Whether a Given Value or Word is a Palindrome

In [16]:
```
value = input("Enter a value (or word): ")
if value == value[::-1]:
    print("{} is a Palindrome".format(value))
else:
    print("{} is Not a Palindrome".format(value))
print("Program Execution Completed")
```

```
liril is a Palindrome
Program Execution Completed
```

In [18]:
```
value = input("Enter a value (or word): ")
if value == value[::-1]:
    print("{} is a Palindrome".format(value))
else:
    print("{} is Not a Palindrome".format(value))
print("Program Execution Completed")
```

```
Mahaboob Khan is Not a Palindrome
Program Execution Completed
```

In [20]:
```
value = input("Enter a value (or word): ")
if value == value[::-1]:
    print("{} is a Palindrome".format(value))
else:
    print("{} is Not a Palindrome".format(value))
print("Program Execution Completed")
```

```
8558 is a Palindrome
Program Execution Completed
```

Program for accepting a number and deciding whether it is +Ve, -Ve, or Zero

In [24]:
```
value = float(input("Enter a Numerical Value: "))
if value > 0:
    print("{} is +VE".format(value))
else:
    if value < 0:
        print("{} is -VE".format(value))
    else:
        print("{} is Zero".format(value))

print("Program Execution Completed")
```

```
5.0 is +VE
Program Execution Completed
```

In [26]:
```
value = float(input("Enter a Numerical Value: "))
if value > 0:
    print("{} is +VE".format(value))
else:
    if value < 0:
        print("{} is -VE".format(value))
    else:
        print("{} is Zero".format(value))

print("Program Execution Completed")
```

```
0.0 is Zero
Program Execution Completed
```

In [28]:
```
value = float(input("Enter a Numerical Value: "))
if value > 0:
    print("{} is +VE".format(value))
else:
    if value < 0:
        print("{} is -VE".format(value))
    else:
        print("{} is Zero".format(value))

print("Program Execution Completed")
```

```
-1.0 is -VE
Program Execution Completed
```

Program for accepting a digit and displaying its name by using if...else statement

In [ ]:
```
d = int(input("Enter a Digit (0-9): "))

if d == 0:
    print("{} is ZERO".format(d))
else:
    if d == 1:
        print("{} is ONE".format(d))
    else:
        if d == 2:
            print("{} is TWO".format(d))
        else:
            if d == 3:
                print("{} is THREE".format(d))
            else:
                if d == 4:
                    print("{} is FOUR".format(d))
                else:
                    if d == 5:
                        print("{} is FIVE".format(d))
                    else:
                        if d == 6:
                            print("{} is SIX".format(d))
                        else:
                            if d == 7:
                                print("{} is SEVEN".format(d))
                            else:
                                if d == 8:
                                    print("{} is EIGHT".format(d))
                                else:
                                    if d == 9:
                                        print("{} is NINE".format(d))
                                    else:
                                        print("{} is NOT a Single Digit Number".for

print("Program Execution Completed")
```

In [43]:
```
d = int(input("Enter a Digit (0-9): "))

if d == 0:
    print("{} is ZERO".format(d))
else:
    if d == 1:
        print("{} is ONE".format(d))
    else:
        if d == 2:
            print("{} is TWO".format(d))
        else:
            if d == 3:
                print("{} is THREE".format(d))
            else:
                if d == 4:
                    print("{} is FOUR".format(d))
                else:
                    if d == 5:
                        print("{} is FIVE".format(d))
                    else:
                        if d == 6:
                            print("{} is SIX".format(d))
                        else:
                            if d == 7:
                                print("{} is SEVEN".format(d))
                            else:
                                if d == 8:
                                    print("{} is EIGHT".format(d))
                                else:
                                    if d == 9:
                                        print("{} is NINE".format(d))
                                    else:
                                        print("{} is NOT a Single Digit Number".for

print("Program Execution Completed")
```

```
23 is NOT a Single Digit Number
Program Execution Completed
```

if ... elif ... else Statement

✅ if...elif...else Statement

Syntax:

if (Test_Cond_1): Block_of_Statements_1

elif (Test_Cond_2): Block_of_Statements_2

elif (Test_Cond_3): Block_of_Statements_3

elif (Test_Cond_n): Block_of_Statements_n

else: Else_Block_of_Statements

Other_Statements_in_Program

✅ Explanation:

If Test_Cond_1 is true, then the Python Virtual Machine (PVM) executes Block_of_Statements_1 and then continues with the other statements in the program.

If Test_Cond_1 is false and Test_Cond_2 is true, then PVM executes Block_of_Statements_2 and then continues with the other statements in the program.

This process continues until a test condition becomes true.

If all test conditions are false, then PVM executes the else block and then other statements in the program.

The else block is optional.

In [7]:
```
# Program to accept a numerical value and check whether
# it is Positive, Negative, or Zero

value = float(input("Enter a Numerical Value: "))
if value > 0:
    print("{} is Positive".format(value))
elif value < 0:
    print("{} is Negative".format(value))
elif value == 0:
    print("{} is Zero".format(value))
print("Program Execution Completed")
```

```
6.0 is Positive
Program Execution Completed
```

In [11]:
```
# Program to accept a numerical value and check whether
# it is Positive, Negative, or Zero
value = float(input("Enter a Numerical Value: "))
if value > 0:
    print("{} is Positive".format(value))
elif value < 0:
    print("{} is Negative".format(value))
elif value == 0:
    print("{} is Zero".format(value))
print("Program Execution Completed")
```

```
-2.0 is Negative
Program Execution Completed
```

In [13]:
```
# Program to accept a numerical value and check whether
# it is Positive, Negative, or Zero
value = float(input("Enter a Numerical Value: "))
if value > 0:
    print("{} is Positive".format(value))
```

```
elif value < 0:
    print("{} is Negative".format(value))
elif value == 0:
    print("{} is Zero".format(value))
print("Program Execution Completed")
```

```
0.0 is Zero
Program Execution Completed
```

In [19]:
```
# Program to accept a digit and display its name using if-elif-else
# This accepts a single digit (0-9) and checks its category

d = int(input("Enter a Digit: "))

if d == 0:
    print("{} is ZERO".format(d))
elif d == 1:
    print("{} is ONE".format(d))
elif d == 2:
    print("{} is TWO".format(d))
elif d == 3:
    print("{} is THREE".format(d))
elif d == 4:
    print("{} is FOUR".format(d))
elif d == 5:
    print("{} is FIVE".format(d))
elif d == 6:
    print("{} is SIX".format(d))
elif d == 7:
    print("{} is SEVEN".format(d))
elif d == 8:
    print("{} is EIGHT".format(d))
elif d == 9:
    print("{} is NINE".format(d))

elif d in [-1, -2, -3, -4, -5, -6, -7, -8, -9]:
    print("{} is a -VE DIGIT".format(d))

elif d > 9:
    print("{} is a +VE NUMBER (not a digit)".format(d))

elif d < -9:
    print("{} is a -VE NUMBER (not a digit)".format(d))

print("Program Execution Completed")
```

```
23 is a +VE NUMBER (not a digit)
Program Execution Completed
```

In [21]:
```
# Program to accept a digit and display its name using if-elif-else
# This accepts a single digit (0-9) and checks its category

d = int(input("Enter a Digit: "))

if d == 0:
    print("{} is ZERO".format(d))
elif d == 1:
```

```
    print("{} is ONE".format(d))
elif d == 2:
    print("{} is TWO".format(d))
elif d == 3:
    print("{} is THREE".format(d))
elif d == 4:
    print("{} is FOUR".format(d))
elif d == 5:
    print("{} is FIVE".format(d))
elif d == 6:
    print("{} is SIX".format(d))
elif d == 7:
    print("{} is SEVEN".format(d))
elif d == 8:
    print("{} is EIGHT".format(d))
elif d == 9:
    print("{} is NINE".format(d))

elif d in [-1, -2, -3, -4, -5, -6, -7, -8, -9]:
    print("{} is a -VE DIGIT".format(d))

elif d > 9:
    print("{} is a +VE NUMBER (not a digit)".format(d))

elif d < -9:
    print("{} is a -VE NUMBER (not a digit)".format(d))

print("Program Execution Completed")
```

```
-1 is a -VE DIGIT
Program Execution Completed
```

In [ ]:
```
# Program for accepting a digit and displaying its name
digit_dict = {0: "ZERO", 1: "ONE", 2: "TWO", 3: "THREE", 4: "FOUR", 5: "FIVE", 6: "
digit = int(input("Enter a digit (0-9): "))
result = digit_dict.get(digit, "Invalid Digit")
print("You entered:", result)
```

In [27]:
```
# Program for accepting a digit and displaying its name
digit_dict = {0: "ZERO", 1: "ONE", 2: "TWO", 3: "THREE", 4: "FOUR", 5: "FIVE", 6: "
digit = int(input("Enter a digit (0-9): "))
result = digit_dict.get(digit, "Invalid Digit")
print("You entered:", result)
```

```
You entered: Invalid Digit
```

In [33]:
```
# Program for accepting a digit and displaying its name
dobj = {0: "ZERO", 1: "ONE", 2: "TWO", 3: "THREE", 4: "FOUR", 5: "FIVE", 6: "SIX",
dig = int(input("Enter a digit (0-9): "))
res = dobj.get(dig) if dobj.get(dig)!=None else "possitive number" if (dig>9) else
print("{} is {}".format(dig ,res))
```

```
20 is possitive number
```

In [35]:
```
# Program for accepting a digit and displaying its name
dobj = {0: "ZERO", 1: "ONE", 2: "TWO", 3: "THREE", 4: "FOUR", 5: "FIVE", 6: "SIX",
dig = int(input("Enter a digit (0-9): "))
```

```
res = dobj.get(dig) if dobj.get(dig)!=None else "possitive number" if (dig>9) else
print("{} is {}".format(dig ,res))
```

```
-1 is Nagtive number
```

In [39]:
```
# Program for accepting a digit and displaying its name
dobj = {0: "ZERO", 1: "ONE", 2: "TWO", 3: "THREE", 4: "FOUR", 5: "FIVE", 6: "SIX",
dig = int(input("Enter a digit (0-9): "))
res = dobj.get(dig) if dobj.get(dig)!=None else "possitive number" if (dig>9) else
print("{} is {}".format(dig ,res))
```

```
1 is ONE
```

In [41]:
```
# Program for accepting a digit and displaying its name
dobj = {0: "ZERO", 1: "ONE", 2: "TWO", 3: "THREE", 4: "FOUR", 5: "FIVE", 6: "SIX",
dig = int(input("Enter a digit (0-9): "))
print("{} is {}".format(dig ,dobj.get(dig) if dobj.get(dig)!=None else "possitive n
```

```
2 is TWO
```

In [ ]:
```
'THE CLASS WILL CONTINUE IN THE NEXT SESSION'
```