Python Ternary Operator (if...else)

Python Ternary Operator

==========

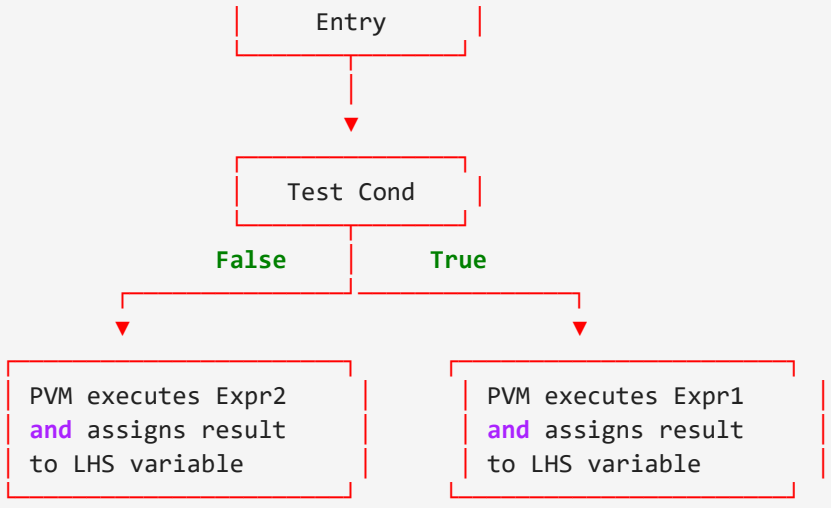
=> The ternary operator in Python is the "if...else" operator.

=> Syntax: varname = Expr1 if Test_Cond else Expr2

=> Here 'if' and 'else' are keywords.
=> The test condition can be either a relational expression or a logical expression, and its result will be either True or False.

=> If the result of the test condition is True, then the PVM executes Expr1 and places its result in the LHS variable name.
=> If the result of the test condition is False, then the PVM goes to else part ane executes Expr2 and whose result places in LHS variable name. => Hence python ternary operator (if, else) executes either Expr1 OR Expr2 and whose result placed in LHS Varname

In [ ]:



In [11]:
```
s="HYDERABAD"
s[::-1]
```

Out[11]: 'DABAREDYH'

In [15]:
```
s="MOM"
s[::-1]
```

Out[15]: 'MOM'

In [19]:
```
s="LIRIL"
s[::-1]
```

Out[19]: 'LIRIL'

In [21]:
```
s="MADAM"
s[::-1]
```

Out[21]: 'MADAM'

In [43]:
```
a="12345"
a==a[::-1]
```

Out[43]: False

In [45]:
```
s="LIRIL"
s==s[::-1]
```

Out[45]: True

In [51]:
```
s="LIRIL"
s[::1]==s[::-1]
```

Out[51]: True

Write a Python program that accepts any word and decides whether it is a palindrome or not?

Orginal and whose Reversed value is called palindrome

In [2]:
```
value=input("Enter a value")
res="Palindrome"if value==value[::-1] else "Not Palindrome"
print("{} is {}".format(value,res)) #ENTER
```

```
Python is Not Palindrome
```

In [4]:
```
value=input("Enter a value")
res="Palindrome"if value==value[::-1] else "Not Palindrome"
print("{} is {}".format(value,res)) #ENTER
```

```
LIRIL is Palindrome
```

In [6]:
```
value=input("Enter a value")
res="Palindrome"if value==value[::-1] else "Not Palindrome"
print("{} is {}".format(value,res)) #ENTER
```

```
MOM is Palindrome
```

In [8]:
```
value=input("Enter a value")
res="Palindrome"if value==value[::-1] else "Not Palindrome"
print("{} is {}".format(value,res)) #ENTER
```

```
MADAM is Palindrome
```

Write a Python Program which will accept two integer values and find the biggest among them and also check for equality?

In [2]:
```
a,b=float(input("Enter the value of a:")),float(input("Enter the value of b:"))
bv=a if a>b else b if b>a else "Both values are Equal"
print("Max({},{}={}".format(a,b,bv))
```

```
Max(10.0,2.0=10.0
```

In [ ]:
```
# Program to accept three numerical values,
# find the biggest among them, and check equality

# Taking input
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))

# Checking conditions
if a == b == c:
    result = "All values are equal"
elif a >= b and a >= c:
    result = a
elif b >= a and b >= c:
    result = b
else:
    result = c

# Displaying result
print("Max({}, {}, {}) = {}".format(a, b, c, result))
```

Program to accept three numerical values,

find the biggest among them, and check equality

In [12]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if (a>b) and (a>c) else b if (b>a) and (b>c) else c if (c>a) and (c>b)else "A
print("{},{},{}={}".format(a,b,c,res))
```

```
3.0,10.0,4.0=10.0
```

In [14]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if (a>b) and (a>c) else b if (b>a) and (b>c) else c if (c>a) and (c>b)else "A
print("{},{},{}={}".format(a,b,c,res))
```

```
10.0,10.0,10.0=All values are equal
```

In [16]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if (a>b) and (a>c) else b if (b>a) and (b>c) else c if (c>a) and (c>b)else "A
print("{},{},{}={}".format(a,b,c,res))
```

```
10.0,20.0,20.0=All values are equal
```

In [18]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if (a>b) and (a>c) else b if (b>a) and (b>c) else c if (c>a) and (c>b)else "A
print("{},{},{}={}".format(a,b,c,res))
```

```
3.0,4.0,20.0=20.0
```

Write a Python Program which will find the smallest value among three numbers?

In [21]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if(b<=a>c) else b if(a>b>=c) else c if(a<=c)>b else "ALL values are equal"
print("{},{},{}={}".format(a,b,c,res))
```

```
10.0,2.0,3.0=10.0
```

In [25]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if(b<=a>c) else b if(a>b>=c) else c if(a<=c>b) else "ALL values are equal"
print("{},{},{}={}".format(a,b,c,res))
```

```
3.0,4.0,5.0=5.0
```

In [27]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if(b<=a>c) else b if(a>b>=c) else c if(a<=c>b) else "ALL values are equal"
print("{},{},{}={}".format(a,b,c,res))
```

```
3.0,3.0,2.0=3.0
```

In [29]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
```

```
res=a if(b<=a>c) else b if(a>b>=c) else c if(a<=c>b) else "ALL values are equal"
print("{},{},{}={}".format(a,b,c,res))
```

```
3.0,2.0,3.0=3.0
```

In [31]:
```
a = float(input("Enter value of a: "))
b = float(input("Enter value of b: "))
c = float(input("Enter value of c: "))
res=a if(b<=a>c) else b if(a>b>=c) else c if(a<=c>b) else "ALL values are equal"
print("{},{},{}={}".format(a,b,c,res))
```

```
30.0,30.0,30.0=ALL values are equal
```

In [6]:
```
lst=[10,2,34,56,12,5,-19,78]
lst.sort()
print(lst[0])
```

```
-19
```

In [8]:
```
print(lst[1])
```

```
2
```

In [10]:
```
print(lst[-1])
```

```
78
```

In [12]:
```
lst=[10,2,34,56,12,5,-19,78]
max(lst)
```

Out[12]: 78

In [14]:
```
lst=[10,2,34,56,12,5,-19,78]
min(lst)
```

Out[14]: -19

In [20]:
```
lst = [10, 2, 34, 56, 12, 5, -19, 78]

# Initialize max and min with first element
maxv = lst[0]
minv = lst[0]

# Loop through list
for val in lst:
    if val > maxv:
        maxv = val
    elif val < minv:   # check separately for min
        minv = val

print("Maximum value:", maxv)
print("Minimum value:", minv)
```

```
Maximum value: 78
Minimum value: -19
```

In [ ]:
```

```

Program for accepting a Word and Deciding whether It has Vowels or Not

In [34]:
```
word = input("Enter any Word: ")
res = "Vowel Word" if any(vowel in word.lower() for vowel in "aeiou") else "Not-Vow
print("{} is {}".format(word,res))
```

```
Mahaboob Khan is Vowel Word
```