Comparision Operation (Relational)

- ">" Greater than
- < less than
- ">=" greater than or equal to
- <= less than or equal to
- == equal to
- != not equal to

In [9]:
```
a=10
b=20
print(a>b)
print(a<b)
print(a>=b)
print(a<=b)
print(a==b)
print(a!=b)
```

```
False
True
False
True
False
True
```

In [8]:
```
a="Dixit"
b="Patel"
print(a>b)
print(a<b)
print(a>=b)
print(a<=b)
print(a==b)
print(a!=b)
```

```
False
True
False
True
False
True
```

Logical operator

- or
- and
- not

1) Boolean type Behaviour

- and ==> if both arguments are true then onlyy result is true
- or ==> if atleast one argument is true then result is true
- not ==> Compliment

In [12]:
```
True and False
```

Out[12]: False

In [14]:
```
False and False
```

Out[14]: False

In [15]:
```
True or False
```

Out[15]: True

In [19]:
```
True and True
```

Out[19]: True

In [17]:
```
not True
```

Out[17]: False

In [20]:
```
True and False and True and True
```

Out[20]: False

2) Non-Boolean type behavior

- 0 means False
- non 0 means True
- empty String false

2.1) X and Y ==> if x is evaluates to false then return x otherwise return Y

In [21]:
```
10 and 20
```

Out[21]: 20

In [22]:
```
0 and 20
```

Out[22]: 0

2.2) X or Y ==> if x is evaluates to True then return x otherwise return Y

In [23]:
```
10 or 20
```

Out[23]: 10

In [25]:
```
0 or 20
```

Out[25]: 20

2.3) Not ==> Compliment

In [ ]:
```

```

Out[27]: False

In [28]:
```
not ""
```

Out[28]: True

Ternary or conditional operation

- x= first value if condition else sexonf value
- -if condition trye then first value will be considered else second value will be consider

In [33]:
```
x=30 if a>b else 40
print(x)
```

```
40
```

Assigment operaters

- we can use assigment operator to assign value to the variable

In [43]:
```
x=2272.38
x+=10 #x=x+10
print (x)

x-=10 #x=x-10
print (x)


x*=10 #x=x*10
print (x)

x/=10 #x=x/10
print (x)

x//=10 #x=x//10
print (x)

x%=10 #x=x%10
print (x)

x**=10 #x=x**10
print (x)
```

```
2282.38
2272.38
22723.800000000003
2272.38
227.0
7.0
282475249.0
```

Membership Operation

- to check whether to given object is present in the given collection(String , List , Tuple , Dict , set)
- in --> returns true if given object is present in the specified collection

- Not in ==>returns True if given object is not present in the specified collection

In [44]:
```
x="Hello My self Dixit Patel , U can call me DP "
print("i" in x)
print("Dixit" in x)
print("b" in x)
print("b" not in x)
```

```
True
True
False
True
```

In [47]:
```
7 and 0 or 5 and 3 or 7/0
```

Out[47]:
```
3
```

In [49]:
```
7 and 0 or 5 and 3 and 7/0
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
<ipython-input-49-ac11902260cf> in <module>
----> 1 7 and 0 or 5 and 3 and 7/0

ZeroDivisionError: division by zero
```

In [50]:
```
print(5==5.0 or 10 and 5 or 5==5.0 and 7!=1.0)
```

```
True
```

In [57]:
```
new=(1 and "True") and ("False" or Trai)
str="This Statement is "+new
print("This is False" if "False" in new else " This is true" )
```

```
This is False
```

ord() and chr()

- ord() char to ASCII
- chr() Ascii to char

In [59]:
```
ord("D")
```

Out[59]:
```
68
```

In [60]:
```
chr(100)
```

Out[60]:
```
'd'
```

In [ ]:
```

```