100 Days Python Challenge

DAY3

Operations: Arithmetic, logical, Relation or Boolean

1)Arithmetic Operation: The operators that are used to perform arithmetic operations such as addition, subtraction, multiplication common division and modulus are called arithmetic operators.

They go by the symbol /, *, +, -, %

In [68]:

```
#example for Arithmetic operation +

print("Below is Example of + operator")

a=2+2
print(a)
#it can also be executed as

print(2+2)
```

```
Below is Example of + operator
4
4
```

In [69]:

```
#example for Arithmetic operation -

print("Below is Example of - operator")

a=2-2
print(a)
#it can also be executed as

print(2-2)
```

```
Below is Example of - operator
0
0
```

In [70]:

```python
#example for Arithmetic operation *

print("Below is Example of * operator")

a=2+2
print(a)
#it can also be executed as

print(2+2)
```

```
Below is Example of * operator
4
4
```

In [71]:

```python
#example for Arithmetic operation /

print("Below is Example of / operator")

a=2/2
print(a)
#it can also be executed as

print(2/2)

print("Note:- the / operator output is always float")
```

```
Below is Example of / operator
1.0
1.0
Note:- the / operator output is always float
```

In [72]:

```python
#example for Arithmetic operation %

print("Below is Example of % operator")

a=2%2
print(a)
#it can also be executed as

print(2%2)
```

```
Below is Example of % operator
0
0
```

2) Logical operations:- The logical operations we may have to combine two or more relational operations to get a true or false or a yes or no output In such situations we use it logical operators

The output of the logical expression will either be a true or a false always, the expression that contains only logical operators are called logical expression.

The operations are denoted by symobls:- !, &, ||

there are more kinds of logical operations we deal with that as we journey through the learning process

Note: 0 denotes as false and 1 denotes as true

In [73]:

```
a=10
b=20

print(a!=b)
```

True

In [74]:

```
a=10
b=20

print(a&b)
print("we can also use keyword and, the value is",a and b)
```

0
we can also use keyword and, the value is 20

In [75]:

```
a=10
b=20

print(a or b) ## in this case it prints the value.
print("we can also use keyword and, the value is",a | b) # as it is a or it can print eithe
```

10
we can also use keyword and, the value is 30

We will Study more on this in branching

3) Relational operator:- if we have to compare two quantities which results in either true or false or yes or no output. In such situation relational operator is used, operators that are used to find the relationship between two operands are called relational operators the two operands may be constant variable or an expression the relationship between the two apparent values results in either true or false(0 or 10).

The expressions used in relational operators are as follows:- <, >, <=, >=, ==, !=

In [76]:

```
a=10
b=20

print(a < b) ## in this case it prints the value.
```

True

In [77]:

```python
a=10
b=20

print(a > b) ## in this case it prints the value.
```

False

In [78]:

```python
a=10
b=20

print(a <= b) ## in this case it prints the value.
```

True

In [79]:

```python
a=10
b=20

print(a >= b) ## in this case it prints the value.
```

False

In [80]:

```python
a=10
b=20

print(a == b) ## in this case it prints the value.
```

False

In [81]:

```python
a=10
b=20

print(a != b) ## in this case it prints the value.
```

True

Thats all for now Thank You

Next day we study more on data types, Strings, lists, tuples, Sets and dictonaries

In [ ]: