

* Bitwise operators -

Complement (~) (tilde)

And (&)

Or (|)

XOR (^)

Left shift (<<) $\rightarrow 10 << 2$

Right shift (>>) \downarrow

$10104 \cdot 0000 = 101000 \cdot 000$

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* Import Math Functions -

import math

$x = \text{math.sqrt}(25)$

E.g.

- 3 ceil (Highest value)

Floor

2.5

ceil

- 2 floor (Least value)

Alias \rightarrow import math as m

$\text{math.sqrt}(25) \rightarrow 5.0$

$m.\text{sqrt}(25) \rightarrow 5.0$

Import the limited math functions:-

>>> from math import sqrt, pow

>>> $\text{pow}(4,5) \rightarrow 1024.0$ (no need to mention math here)

* input function -

input function converts the ~~into~~ input into the str format

That's why mention the datatype whenever try to take input from user.

E.g. `x = int(input("Enter a no. "))`
`y = int(input("Enter a no. "))`

* eval function -

Its evaluate a expression entered by a user.

e.g.

```
result = eval(input('enter an expression'))  
print(result)
```

* If elif statement:

Syntax:-

```
if (condition):
```

```
    statement 1
```

```
    statement 2
```

```
else:
```

```
    statement 3
```

Indentation is
important here

* While Loop in python:

Using for performing a one task more than one time.

For repeating the tasks

We need to mention a counter for how many times we want to repeat that task.

3 Important points are;

`i = 1` → Initialization

`while i <= 5:` → Condition

```
    print("Hi")
```

`i = i + 1` → Increment / Decrement