PYTHON

Arithmetic Operators

Addition

- **Operator** : +

- **Description** :

  In Python, Add values on either side of the operator.

- **Example**: a+b

  Let's a=10 , b=20

  Output : 30

Subtraction

- **Operator** :   -

- **Description** :
  In Python, Subtract right hand operand from left hand operand.

- **Example** : a-b

  Let's a=10 , b=20

  Output : -10

Multiplication

- **Operator** :   *

- **Description** :
  In Python, Multiplies values on either side of the operator.
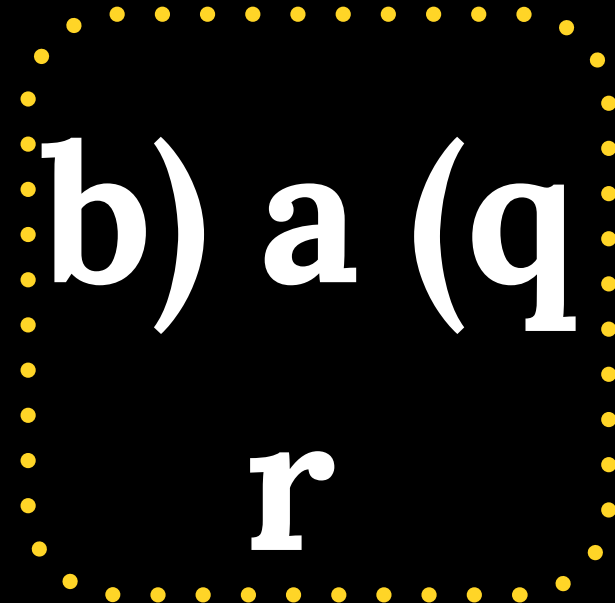
- **Example** : a*b

  Let's a=10 , b=20

  Output : 200

Division

- **Operator** : /

- **Description** :
  In Python, Divides left hand operand by right hand operand.

- **Example** : a/b

  Let's a=10 , b=20

  Output : 2

Modulus

- **Operator** : %

- **Description** :
  In Python, Divides left hand operand by right hand operand and returns remainder.

- **Example** : a%b   **b) a (q**
  r

  Let's a=20 , b=10
  Output : 0

Exponentiation

- **Operator** :   **

- **Description** :
  In Python, Performs exponential or power calculation on operators

- **Example** :   a**b

Let's a=10 , b=2
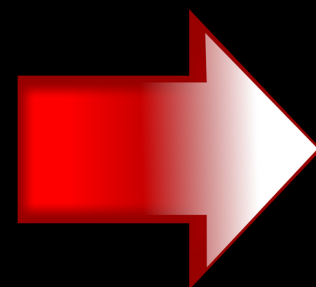
Output : 100

Floor Division

- **Operator** : //

- Case – 1

    Where m & n tends to +infinity than it returns q.

- **Example** : m//n

n) m (q
r

➡️ **Let's m=4 , n=2, 0** 4//2 **Output** : 2
m=11 , n=3, 11//3 **Output** : 3
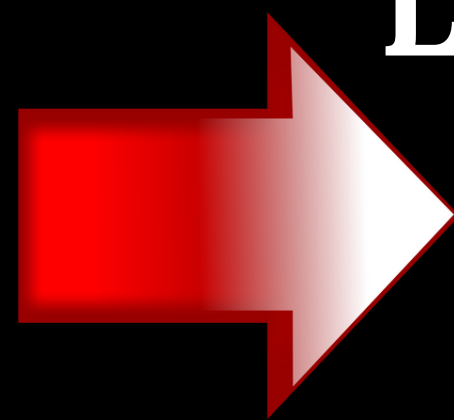**m=8 , n=2 ,** 8//2 **Output** : 4

Floor Division...

- Case - 2

Where m or n (not m and n) tends to -infinity & r=0 (perfectly divisible) than it returns -(q).

- **Example** : $m//n$

n) m (q

r

➡️ **Let's m=-4 , n=2, -4//2 Output : -2**

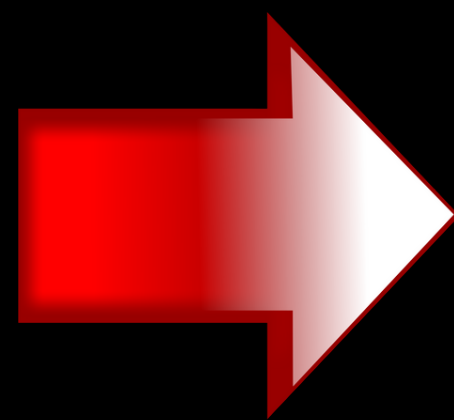**m=-6, n=3, -6//3 Output : -2**

m=6 , n=-3, 6//-3 Output : -2

Floor Division...

- Case – 3

  Where m or n (not m and n) tends to -infinity and r!=0 (NOT perfectly divisible) than it returns -(q+1)

- **Example** : m//n

n) m (q

r

Let's m=-11 , n=3, -11//3 Output : -4

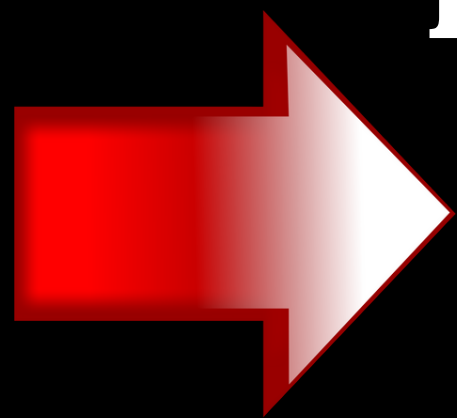**m=8, n=-3, 8//-3   Output : -3**

m=13 , n=-2, 13//-2 Output : -7

Floor Division...

- Case – 4

  Where m and n both tends (move towards) to -infinity then **refer Case 1**.

- **Example** : m//n

n) m (q

r

➡️

Let's m=-11 , n=-3, 11//3 Output : 3

m=-8, n=-3, -8//-3   Output : 2

m=-13 , n=-2, -13//-2 Output : 6

THANK YOU