Expressions

- The instruction that we write using operators is called expressions

```
c = a + b
# c , a , b are operands
# = , + are operators
```

Lets take example :

```
d = 2+3*5          #3*5=15
d = 2+15
d=17
```

- This happened because of precedence .
- First multiplication takes place because it has higher precedence than addition
- They will execute based on their precedence

```
d = 2*3 + 8/2
  = 6 + 4 = 10
```

- To increase the precedence we use ( )

```
2+3*5  # first multiplication take place because it have higher precedence than addition
2+15 = 17
```

By using parentheses

```
(2+3) * 5 # here addition will take place because parentheses have higher precedence than all
5 * 5 = 25
```

- What if we are having

```
d=3*4*5/4      # * , / have same precedence
```

→

So it will do left to right #first multiplication than division

```
d=2**3**2
```

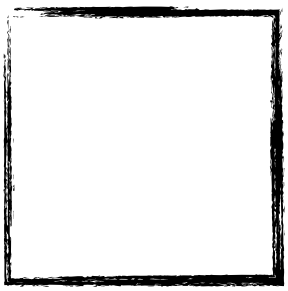
←

It will execute from right to left

Python expressions :

Square .

Area of a square = lb

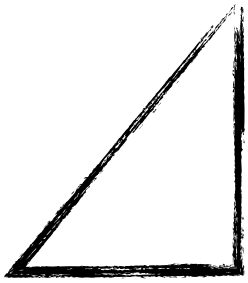


- In python we write using expressions

The area of the square can be written
l * b

Triangle .

Area of a triangle = 1/2 bh



In python = 1/2*b*h

Trapezium

Area of a trapezium = a+b/2 h

- In python we write using python expressions area= (a+b) / 2*h

Displacement

$(v^2-u^2/2a)$

In python

(v**2-u**2)/(2*a)

Equal roots

(-b/2a)

In python using expressions

(-b/(2*a))