

ARITHMETIC OPERATIONS

```
In [32]: 9+9 -10*3 -3
```

```
Out[32]: -15
```

```
In [34]: # 9 , 9,10 , 3 , 3 == operend  
# +,-== operator
```

the numbers are called as operend

the -+*/ are called as operator

Arithmetic operators

```
In [38]: 7*7  
# MULTIPLICATION
```

```
Out[38]: 49
```

```
In [40]: 7**7  
# POWER
```

```
Out[40]: 823543
```

```
In [42]: 7***7
```

```
Cell In[42], line 1  
    7***7  
      ^  
SyntaxError: invalid syntax
```

```
In [44]: 10/4  
#float division
```

```
Out[44]: 2.5
```

```
In [46]: 10 // 4  
# intiger division
```

```
Out[46]: 2
```

```
In [48]: 10%5  
#modulas
```

```
Out[48]: 0
```

```
In [50]: 10%%5
```

Cell In[50], line 1

```
10%%5
```

^

SyntaxError: invalid syntax

```
In [52]: #ASSIGNMENT OPERATOR
```

```
In [54]: x= 10
x is called object or variable or identifiers
x =variable
10= value
```

Cell In[54], line 2

```
x is called object or variable or identifiers
```

^

SyntaxError: invalid syntax

```
In [56]: x = 10
```

```
In [58]: x+2
```

```
Out[58]: 12
```

```
In [60]: x+2
```

```
Out[60]: 12
```

incremental assignment

```
In [63]: x += 2
x
```

```
Out[63]: 12
```

```
In [65]: x += 2
x
```

```
Out[65]: 14
```

decremental assignment

```
In [68]: x -= 2
x
```

```
Out[68]: 12
```

```
In [70]: x *= 2
x
```

```
# modify the x
```

Out[70]: 24

```
In [72]: x * 2  
# just gives operation value
```

Out[72]: 48

```
In [74]: x*=2  
x
```

Out[74]: 48

```
In [76]: x/=2  
x
```

Out[76]: 24.0

```
In [78]: x/=2  
x
```

Out[78]: 12.0

```
In [80]: # UNARY OPERATOR
```

```
In [82]: n=7  
m=- (n)  
m
```

Out[82]: -7

string

```
In [85]: "nareshit"  
s= "nareshit"  
s
```

Out[85]: 'nareshit'

```
In [87]: len(s)
```

Out[87]: 8

indexing & slicing

```
In [90]: s[5]
```

Out[90]: 'h'

```
In [92]: s[7]
```

Out[92]: 't'

```
In [94]: for i in s :  
         print (i)
```

n
a
r
e
s
h
i
t

```
In [96]: s[0:5]
```

Out[96]: 'nares'

```
In [98]: s[::1]
```

Out[98]: 'nareshit'

```
In [100... s[::-1]
```

Out[100... 'tihseran'

```
In [102... s[-1]
```

Out[102... 't'

```
In [104... #Count starts from 0_1_2
```

```
In [106... #reverse count starts form -1_-2  
# formula used is (n-1)
```

```
In [108... language = "python"
```

```
In [110... a,b,c,d,e,f=language
```

```
In [112... print(a,b,c,d,e,f)
```

p y t h o n

```
In [114... for i in language:  
         print(i)
```

p
y
t
h
o
n

```
In [116... print('''I am studying in  
naresh it  
with Prakash senapathi sir''')# ''' ''' are used for mutiple line string
```

I am studying in
naresh it
with Prakash senapathi sir

```
In [118... print('I hope every one enjoying the python challenge.\nDo you ?')
```

I hope every one enjoying the python challenge.
Do you ?

```
In [120... print('Days\tTopics\tExercises')
```

Days Topics Exercises

```
In [122... print('Day 1\t3\t5')
```

Day 1 3 5

```
In [124... #String Concatenation  
first_name = 'Pratik'  
last_name = 'Sadewad'  
space=' '  
full_name = first_name + space + last_name  
print(full_name)
```

Pratik Sadewad

```
In [126... challenge = 'thirty days of python'  
print(challenge.capitalize())
```

Thirty days of python

```
In [128... challenge.title()
```

```
Out[128... 'Thirty Days Of Python'
```

```
In [142... challenge.count('y'),challenge.count('d') # no. of times letters present in
```

```
Out[142... (3, 1)
```

```
In [146... challenge
```

```
Out[146... 'thirty days of python'
```

```
In [148... challenge.isalnum() # al = alfa-numeric i.e aA10 = True, space !@#$$% = Fa
```

Out[148... False

```
In [150... challenge='thirtydaysofpython'
```

```
In [152... challenge.isalnum()
```

Out[152... True

```
In [156... challenge = 'thirty days of python'
```

```
In [160... challenge= 'thirty'  
print(challenge.isdigit())
```

False

```
In [174... name=['pratik','praksah','sadowad']#skips last string  
result='@ '.join(name)
```

```
In [176... result
```

Out[176... 'pratik@ praksah@ sadowad'

```
In [182... challenge
```

Out[182... ' thirty days of python '

```
In [192... challenge.replace('python','coding')
```

Out[192... ' thirty days of coding '

```
In [196... challenge.split()
```

Out[196... ['thirty', 'days', 'of', 'python']

```
In [198... name = "pratik prakash sadowad"# usefull  
name.split()
```

Out[198... ['pratik', 'prakash', 'sadowad']

```
In [ ]:
```