

```
In [1]: print (3+2)
```

5

```
In [2]: print(3-1)
```

2

```
In [4]: print (3*2)
```

6

```
In [5]: print(3/2)
```

1.5

```
In [7]: print (3**2)
```

9

```
In [8]: print(3%2)
```

1

```
In [9]: print (3//2)
```

1

## Checking Data Types

```
In [11]: print(type(10))
```

<class 'int'>

```
In [12]: print (type(3.14))
```

<class 'float'>

```
In [13]: print(type(1+3j))
```

<class 'complex'>

```
In [14]: print(type('Munna'))
```

<class 'str'>

```
In [16]: print(type([1,2,3]))
```

<class 'list'>

```
In [18]: print(type({'name': 'Munna'}))
```

<class 'dict'>

```
In [19]: print(type({9.8,3.14,2.7}))
```

<class 'set'>

```
In [20]: print(type((9.8,3.4,2.7)))
```

<class 'tuple'>

```
In [21]: print(type(3 == 3))
```

```
<class 'bool'>
```

```
In [23]: print(type(3>=3))
```

```
<class 'bool'>
```

## Play with Strings #### Single Line String

```
In [24]: letter = 'P'
```

```
In [25]: print(letter)
```

P

```
In [26]: print(len(letter))
```

1

```
In [27]: greeting = ' Hello,world'
greeting
```

```
Out[27]: ' Hello,world'
```

```
In [28]: print(greeting)
```

Hello,world

```
In [29]: print(len(greeting))
```

12

```
In [30]: sentence = ' I hope your are enjoying 30 days of python challenge '
print(sentence)
```

I hope your are enjoying 30 days of python challenge

## Multi Line String

```
In [32]: multiline_string = """I am a teacher and enjoy teaching.
I didn't find anything as rewarding as empowering people.
That is why I created 30 days of python."""
print(multiline_string)
```

I am a teacher and enjoy teaching.  
I didn't find anything as rewarding as empowering people.  
That is why I created 30 days of python.

## string Concatenatio

```
In [34]: first_name = 'Munna'
last_name = 'Kona'
space = ' '
full_name = first_name + space + last_name
print(full_name)
```

Munna Kona

```
In [35]: print(len(full_name))
```

10

```
In [38]: print(len(first_name))
```

5

```
In [39]: print(len(last_name))
```

4

```
In [41]: print(len(first_name) < len(last_name))
```

False

```
In [42]: print(len(full_name))
```

10

## UnPacking Characters

```
In [43]: language = 'Python'  
a,b,c,d,e,f = language
```

```
In [44]: print(a)
```

P

```
In [45]: print(b)
```

y

```
In [46]: print(c)
```

t

## Accessing Characters in Strings by Index

```
In [47]: language = 'Python'
```

```
In [49]: first_letter = language[0]  
print(first_letter)
```

P

```
In [50]: second_letter = language[1]  
print(second_letter)
```

y

```
In [52]: last_index = len(language)-1  
print(last_index)
```

5

```
In [53]: last_letter = language[last_index]  
print(last_letter)
```

n

```
In [54]: last_letter = language[-1]  
print(last_letter)
```

n

```
In [55]: second_last = language[-2]
         print (second_last)
```

o

```
In [56]: ### Slicing ###
```

```
In [58]: first_three = language[0:3]
         print(first_three)
```

Pyt

```
In [59]: last_three = language[3:6]
         print(last_three)
```

hon

```
In [60]: ## Escape Sequence
```

```
In [62]: print('I hope every one enjoying the python challenge.\nDo you ?')
```

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

```
In [63]: print('Days\tTopics\tExercises')
```

Days      Topics      Exercises

```
In [64]: print('Day 1\t3\t5')
```

Day 1    3            5

```
In [65]: print('Day 2\t3\t5')
```

Day 2    3            5

```
In [66]: print('This is a black slash symbol (\\)')
```

This is a black slash symbol (\\)

```
In [67]: print('In every programming language it starts with \"Hello, World!\\\"')
```

In every programming language it starts with "Hello, World!"

```
In [68]: ### String Methods ##
```

```
In [71]: challenge = 'thirty days of python'
         print(challenge.capitalize())
```

Thirty days of python

```
In [72]: print(challenge.count('y'))
```

3

```
In [74]: print(challenge.count('th'))
```

2

```
In [75]: print(challenge.count('a',7,14))
```

1

```
In [76]: # string ends with()
```

```
In [77]: print(challenge.endswith('on'))
```

True

```
In [79]: print(challenge.endswith('per'))
```

False

```
In [81]: print(challenge.find('th'))
```

0

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```