

```
In [1]: 1 # predefined function in python
        2 name = "Ketan"
        3 print(len(name))

        4
```

```
In [2]: 1 # predefined function in python
        2 number = 273.33
        3 print(round(number))

        273
```

```
In [3]: 1 # predefined function in python
        2 integer = 321
        3 print(type(integer))
        4

        <class 'int'>
```

```
In [4]: 1 # predefined function in python
        2 number_2 = -12.33
        3 print(abs(number_2))
        4

        12.33
```

```
In [5]: 1 # predefined function in python
        2 minimum = [5,4,3,2,1]
        3 print(min(minimum))

        1
```

```
In [6]: 1 # predefined function in python
        2 name2 = "Python"
        3 print(name2.isalnum())
        4

        True
```

```
In [7]: 1 # predefined function in python
        2 a = 5
        3 print(a, " is a type" , type(a))

        5 is a type <class 'int'>
```

```
In [8]: 1 # predefined function in python
        2 a = 2.0
        3 print(a, " is a type" , type(a))

        2.0 is a type <class 'float'>
```

```
In [9]: 1 # predefined function in python
        2 a = 1 + 2j
        3 print(a, " is a type" , type(a))
```

(1+2j) is a type <class 'complex'>

```
In [10]: 1 # list program in python
         2 a = [1,22,33,44,55,66,7,8,9,0]
         3 print(a[3])
```

44

```
In [11]: 1 # list program in python
         2 names = ['Riya' , 'ketan' , 'Vasu' , 'urvil']
         3 print(names[1])
```

ketan

```
In [12]: 1 # list program in python
         2 a = [1,22,33,44,55,66,7,8,9,0]
         3 print(a[3])
```

44

```
In [13]: 1 # list program in python
         2 a = [1,2,3]
         3 a[2] = 4
         4 print(a)
```

[1, 2, 4]

```
In [14]: 1 # list program in python
         2 items = [5,"programs",1+2j]
         3 print("t[2] = " , items[1])
```

t[2] = programs

```
In [16]: 1 # string concatenation in python
         2 String_1 = "This is just a string ."
         3 String_2 = "This is to test a string if it is working or not . "
         4 String_3 = "And the test just worked ."
         5 print(String_1 + String_2 + String_3)
```

This is just a string .This is to test a string if it is working or not . And the test just worked .

```
In [17]: 1 # set program in python
         2 set = {"one","two","three","four"}
         3 print("a =" , set)
```

a = {'three', 'two', 'four', 'one'}

```
In [18]: 1 # dictionary program in python
         2 dict = {0:'one',1:'two',2:'three'}
         3 print(dict[1])
```

two

```
In [19]: 1 # type conversion in python
         2 a = 5
         3 print(float(a))
```

5.0

```
In [20]: 1 if True:
         2     1 + 2
         3 else:
         4     1 + 2
         5
```

```
In [21]: 1 # dynamic typing
         2 item = 12
         3 print(item)
         4 item = "hello"
         5 print(item)
```

12
hello

```
In [54]: 1 #buit-in function
         2 NUMBER = -20
         3 ABSOLUTE_NUMBER = abs(NUMBER)
         4 print (ABSOLUTE_NUMBER)
         5
```

20

```
In [24]: 1 number = -29.666
         2 absolute_number = abs(number)
         3 print (absolute_number)
         4
```

29.666

```
In [25]: 1 # Len function
         2 languages = ['python', 'java', 'xml']
         3 print(len(languages))
         4
```

3

```
In [27]: 1 # Len() function with tuples, lists and range
2 list_1 = [1,2,3]
3 print('Length of the list = ', len(list_1))
```

Length of the list = 3

```
In [29]: 1 # Len() function with tuples, lists and range
2 list_1 = [1,2,3]
3 print('Length of the list = ', len(list_1))
4 tuple_1 = (1,2,3)
5 print('Length of the tuple = ', len(tuple_1))
6 range_1 = range(1,10)
7 print('Length of the range = ', len(range_1))
```

Length of the list = 3
Length of the tuple = 3
Length of the range = 9

```
In [31]: 1 # Len() function with strings and bytes
2 testString = ''
3 print('Length of testString = ', len(testString))
4
```

Length of testString = 0

```
In [33]: 1 # Len() function with strings and bytes
2 testByte = b'python'
3 print('Length of testbyte = ', len(testByte))
```

Length of testbyte = 6

```
In [34]: 1 # Len() function with strings and bytes
2 testByte = b'python'
3 print('Length of testbyte = ', len(testByte))
```

Length of testbyte = 6

```
In [39]: 1 testlist = [1,2,3]
2 testbyte = bytes(testlist)
3 print('Length of the bytes in testlist = ', testbyte, len(testbyte))
```

Length of the bytes in testlist = b'\x01\x02\x03' 3

```
In [41]: 1 # Len() function with dictionaries and sets
2 testset = {1,2,3}
3 print('Length of the testset = ', len(testset))
4 testdict = {1: 'one', 2: 'two'}
5 print('Length of the testdict = ', len(testdict))
6
```

Length of the testset = 3
Length of the testdict = 2

```
In [43]: 1 # using a min() function
2 numbers= [9,34,11, -4,27]
3 print('Minimum number among the numbers = ',min (numbers))
```

Minimum number among the numbers = -4

```
In [46]: 1 # rounding the numbers using round()
2 a = 51.42
3 b = 49.66
4 c = 99.77
5 print(round(a))
6 print(round(b))
7 print (round(c))
```

51
50
100

```
In [47]: 1 # rounding the numbers to specified decimal place
2 print (round (2.6666,3))
3 print (round (2.6666,2))
4 print (round (2.6666,1))
```

2.667
2.67
2.7

```
In [48]: 1 # using isalnum() with strings
2 name1="jake99"
3 print(name1.isalnum())
4 name2="jake@99"
5 print(name2.isalnum())
```

True
False

```
In [49]: 1 a = (5, 'program', 232 , 'python')
2 print(a[0])
3 print(a[1])
4 print(a[2])
```

5
program
232

```
In [50]: 1 # python set program
2 a = {"un", "dies", "trois", "quatre"}
3 print(a)
4 print('Length of set a = ', len(a))
```

{'un', 'trois', 'dies', 'quatre'}
Length of set a = 4

```
In [52]: 1 dict_1 = {0: 'zero', 2: 'two', 3: 'three'}  
2 print(dict_1[3])
```

three

```
In [53]: 1 #type converion in python  
2 a = 10  
3 b = 20  
4 print (float(a + b))
```

30.0

```
In [ ]: 1
```