

```
In [9]: x=10
print(float(x))
print(type(float(x)))
```

```
10.0
<class 'float'>
```

```
In [10]: x=10.5
print(int(x))
print(type(int(x)))
```

```
10
<class 'int'>
```

```
In [1]: large=max(10,80,20,380,500,5,70)
print(large)
```

```
500
```

```
In [3]: smaller=min(10,80,20,380,500,5,70)
print(smaller)
```

```
5
```

```
In [4]: str1="welcome"
str2="welcome"
print(id(str1))
print(id(str2))
```

```
1910649429104
1910649429104
```

```
In [6]: str1="welcome"
str1=str1+'python'
print(id(str1))
```

```
1910649403056
```

```
In [8]: str1="welcome"
print(str1+"to python")
print(str1*3)
```

```
welcometo python
welcomewelcomewelcome
```

```
In [9]: str="welcome"  
print(str[1:3])
```

el

```
In [10]: str="myworld"  
print(str[1:4])
```

ywo

```
In [13]: str="welcome"  
print(str[:8])  
print(str[5:])
```

welcome
me

```
In [14]: print(ord('c'))  
print(ord('z'))
```

99
122

```
In [16]: print(chr(99))  
print(chr(122))
```

c
z

```
In [21]: str="welcome"  
print(len(str))  
print(max(str))  
print(min(str))
```

7
w
c

```
In [23]: str="welcome to python"  
print("to" in str)  
print("to" not in str)
```

True
False

```
In [25]: print("tim"=="Tim")  
print("hello"=="hello")
```

False
True

```
In [37]: print("time"!="time")
print("hello"!="hai")
print("python">"py")
print("python">="on")
print("python"<"than")
print("yello"<="fellow")
print("abc"<"")
```

False
True
True
True
True
False
False

```
In [1]: str="python"
for i in str:
    print(i)
```

p
y
t
h
o
n

```
In [13]: str="amulya arshanapelli"
print(str.islower())
print(str.isupper())
print(str.isspace())
print(str.isalpha())
print(str.isdigit())
```

True
False
False
False
False

```
In [22]: str="welcome to python"
print(str.endswith('thon'))
print(str.startswith('to'))
print(str.find("py"))
print(str.count('o'))
print(str.rfind('o'))
print(str.find(crawe))
```

```
True
False
11
3
15
```

```
-----
NameError                                Traceback (most recent call last)
C:\Users\AMULYA~1\AppData\Local\Temp\ipykernel_13584\2930224050.py in <module>
      5 print(str.count('o'))
      6 print(str.rfind('o'))
----> 7 print(str.find(crawe))

NameError: name 'crawe' is not defined
```

```
In [32]: s='string in PYTHON'
print(s.capitalize())
print(s.lower())
print(s.upper())
print(s.swapcase())
print(s.replace('in','on'))
print(s)
```

```
String in python
string in python
STRING IN PYTHON
STRING IN python
strong on PYTHON
string in PYTHON
```

```
In [2]: l1=[1,2,3,4]
l2=[5,4,6,7]
list=l1+l2
print(list)
```

```
[1, 2, 3, 4, 5, 4, 6, 7]
```

```
In [3]: l1=[1,3,5,7,9]
print(l1*2)
```

```
[1, 3, 5, 7, 9, 1, 3, 5, 7, 9]
```

```
In [8]: l=[1,2,19,4,7,8,15]
        print(4 in l)
        print(7 not in list)
```

True
False

```
In [9]: l=[1,3,7,9,26,78]
        for i in l:
            print(i)
```

1
3
7
9
26
78

```
In [13]: l=[1,3,7,9,26,78]
         for i in l:
             print(i,end="")
```

13792678

```
In [13]: l=[1,21,5,56,9]
l2=[74,59]
print(l)
l.append(45)
print(l)
print(l.count(1))
l.extend(l2)
print(l)
print(l.index(5))
print(l.index(45))
l.insert(1,12)
l.insert(2,5)
print(l)
print(l.pop(3))
print(l)
print(l.pop(2))
print(l)
print(l.remove(59))
print(l)
print(l.reverse())
print(l)
print(l.sort())
print(l)
```

```
[1, 21, 5, 56, 9]
[1, 21, 5, 56, 9, 45]
1
[1, 21, 5, 56, 9, 45, 74, 59]
2
5
[1, 12, 5, 21, 5, 56, 9, 45, 74, 59]
21
[1, 12, 5, 5, 56, 9, 45, 74, 59]
5
[1, 12, 5, 56, 9, 45, 74, 59]
None
[1, 12, 5, 56, 9, 45, 74]
None
[74, 45, 9, 56, 5, 12, 1]
None
[1, 5, 9, 12, 45, 56, 74]
```

```
In [1]: for i in range(10):
        print(i)
```

```
0
1
2
3
4
5
6
7
8
9
```

```
In [3]: l=[i for i in range(10)]  
print(l)
```

```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```

```
In [4]: l=[i+1 for i in range(10)]  
print(l)
```

```
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

```
In [5]: l=[i for i in range(10) if i%2==0]  
print(l)
```

```
[0, 2, 4, 6, 8]
```

```
In [6]: l=[i for i in range(10) if i%2==1]  
print(l)
```

```
[1, 3, 5, 7, 9]
```

```
In [1]: l={'101':'Amulya','102':'Vedha','103':'Kiran'}  
print(l)
```

```
{'101': 'Amulya', '102': 'Vedha', '103': 'Kiran'}
```

```
In [18]: name={'101':'Amulya','102':'Vedha','103':'Kiran'}  
print(name['101'])  
print(name['103'])  
name['104']='harsha'  
print(name)  
name['102']='chinna'  
print(name)  
del name['102']  
print(name)
```

```
Amulya
```

```
Kiran
```

```
{'101': 'Amulya', '102': 'Vedha', '103': 'Kiran', '104': 'harsha'}
```

```
{'101': 'Amulya', '102': 'chinna', '103': 'Kiran', '104': 'harsha'}
```

```
{'101': 'Amulya', '103': 'Kiran', '104': 'harsha'}
```

```
In [22]: data={'1':'amulya','2':'jack','3':'vedha','4':'hemanth'}  
for i in data:  
    print(i, ":", data[i])
```

```
1 : amulya
```

```
2 : jack
```

```
3 : vedha
```

```
4 : hemanth
```

```
In [24]: data={'1':'abc', '2':'def', '3':'ghi', '4':'jkl'}
        for x in data:
            print(x,":", data[x])
```

```
1 : abc
4
2 : def
4
3 : ghi
4
4 : jkl
4
```

```
In [25]: data={'1':'abc', '2':'def', '3':'ghi', '4':'jkl'}
        print(len(data))
```

```
4
```

```
In [30]: d1={'1':'madhu', '2':'roshan'}
        d2={'2':'roshan', '1':'madhu', '3':'ragha'}
        print(d1==d2)
        print(d1!=d2)
```

```
False
True
```

```
In [44]: data={'1':'abc', '2':'def', '3':'ghi', '4':'jkl'}
        print(data.popitem())
        print(data)
        print(data.keys())
        print(data.values())
        print(data.get('1'))
```

```
('4', 'jkl')
{'1': 'abc', '2': 'def', '3': 'ghi'}
dict_keys(['1', '2', '3'])
dict_values(['abc', 'def', 'ghi'])
abc
```

```
In [40]: d2={'2':'roshan', '1':'madhu', '3':'ragha'}
        print(d2)
        print(d2.popitem())
        print(d2)
        print(d2.clear())
```

```
{'2': 'roshan', '1': 'madhu', '3': 'ragha'}
('3', 'ragha')
{'2': 'roshan', '1': 'madhu'}
None
```



```
In [49]: d2={'2':'roshan','1':'madhu','3':'ragha'}  
print(d2)  
print(d2.pop('3'))
```

```
{'2': 'roshan', '1': 'madhu', '3': 'ragha'}  
ragha
```

```
In [53]: tup=(1,2,3,4)  
print(tup)  
tup=[1,2,3,4,5]  
print(tup)  
t=tuple("abcde")  
print(t)
```

```
(1, 2, 3, 4)  
[1, 2, 3, 4, 5]  
( 'a', 'b', 'c', 'd', 'e')
```

```
In [56]: t1=(1,3,5,7,9,11,56,91,79)  
print(sum(t1))  
print(min(t1))  
print(max(t1))  
print(len(t1))
```

```
262  
1  
91  
9
```

```
In [61]: t1=(1,3,5,7,9,11,56,91,79)  
for i in t1:  
    print(i, end=" ")
```

```
1 3 5 7 9 11 56 91 79
```

```
In [69]: t1=(1,3,5,7,9,11,56,91,79)  
print(t1[:4])  
print(t1[2:4])  
print(t1[3:])  
print(t1[2:7:1])
```

```
(1, 3, 5, 7)  
(5, 7)  
(7, 9, 11, 56, 91, 79)  
(5, 7, 9, 11, 56)
```

```
In [73]: t1=(1,3,5,7,9,11,56,91,79)
print(3 in t1)
print(100 in t1)
print(9 not in t1)
print(150 not in t1)
```

```
True
False
False
True
```

```
In [1]: #Generators
lst = [2,7,5,0,4,6]
gen = (x for x in lst if x%3==0)
for i in gen:
    print(i)
```

```
0
6
```

```
In [3]: gen2 = (i**2 for i in range(5))
for item in gen2:
    print(item)
```

```
0
1
4
9
16
```

```
In [ ]:
```