

```
In [1]: s = {}
```

```
In [2]: type(s)
```

```
Out[2]: dict
```

```
In [3]: s = {1,2,3,4,5,6}
```

```
In [4]: type(s)
```

```
Out[4]: set
```

```
In [6]: s
```

```
Out[6]: {1, 2, 3, 4, 5, 6}
```

```
In [7]: s2={"sudh","sudh","Sudh", 1,2,3,4,2,3,4,5,5,6,7,8}
```

```
In [8]: s2
```

```
Out[8]: {1, 2, 3, 4, 5, 6, 7, 8, 'Sudh', 'sudh'}
```

```
In [9]: list(s2)
```

```
Out[9]: ['sudh', 1, 2, 3, 4, 5, 6, 7, 'Sudh', 8]
```

```
In [13]: l=[]
```

```
In [15]: type(l)
```

```
Out[15]: list
```

```
In [13]: l2=[3,4,5,"pwwskills","sudh"]
```

```
In [16]: l2
```

```
Out[16]: [3, 4, 5, 'pwwskills', 'sudh']
```

```
In [17]: set(l2)
```

```
Out[17]: {3, 4, 5, 'pwwskills', 'sudh'}
```

```
In [18]: l1= [1,2,3,4,5, "sudh" , "kumar" , 3+6j, 345.565, True, [3,4,5,6]]
```

```
In [19]: l1
```

```
Out[19]: [1, 2, 3, 4, 5, 'sudh', 'kumar', (3+6j), 345.565, True, [3, 4, 5, 6]]
```

```
In [23]: set(l1)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[23], line 1  
----> 1 set(11)  
  
TypeError: unhashable type: 'list'
```

```
In [24]: tuple(s2)
```

```
Out[24]: ('sudh', 1, 2, 3, 4, 5, 6, 7, 'Sudh', 8)
```

```
In [25]: s2
```

```
Out[25]: {1, 2, 3, 4, 5, 6, 7, 8, 'Sudh', 'sudh'}
```

```
In [26]: s2[0]
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[26], line 1  
----> 1 s2[0]  
  
TypeError: 'set' object is not subscriptable
```

```
In [27]: s3 = {345,456456,23,12,34,56,78,12,12,34,34,56,"sudh",23456}
```

```
In [28]: s3
```

```
Out[28]: {12, 23, 23456, 34, 345, 456456, 56, 78, 'sudh'}
```

```
In [29]: d={}
```

```
In [30]: type(d)
```

```
Out[30]: dict
```

```
In [35]: d1 = {'name' : "aditi" , 'subject' : ["data science", "data analyst"] , 'number':
```

```
In [37]: d1
```

```
Out[37]: {'name': 'aditi',  
          'subject': ['data science', 'data analyst'],  
          'number': 43242424}
```

```
In [38]: d2 = {"name":"aditi" , "name":"pwskills"}
```

```
In [39]: d2
```

```
Out[39]: {'name': 'pwskills'}
```

```
In [40]: d3={23424:"sudh"}
```

```
In [42]: d3={{2,32,4,4}:"aditi"}
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[42], line 1  
----> 1 d3={{2,32,4,4}:"aditi"}  
  
TypeError: unhashable type: 'set'
```

```
In [45]: d3={"%fsf" : "aditi"}
```

```
In [47]: d4= {'course': ['dsa','java','wdev','blockchain','cloud'],'mentor': ('sudh','krish'  
      'price': {3400,8900},'duration':(1,2)}
```

```
In [48]: d4
```

```
Out[48]: {'course': ['dsa', 'java', 'wdev', 'blockchain', 'cloud'],  
      'mentor': ('sudh', 'krish'),  
      'price': {3400, 8900},  
      'duration': (1, 2)}
```

```
In [49]: d4['course']
```

```
Out[49]: ['dsa', 'java', 'wdev', 'blockchain', 'cloud']
```

```
In [50]: d4['mentor']
```

```
Out[50]: ('sudh', 'krish')
```

```
In [51]: d4['price']
```

```
Out[51]: {3400, 8900}
```

```
In [52]: d4['duration']
```

```
Out[52]: (1, 2)
```

```
In [53]: d2
```

```
Out[53]: {'name': 'pwwskills'}
```

```
In [54]: d2['name']
```

```
Out[54]: 'pwwskills'
```

```
In [56]: d2['name']="aditi"
```

```
In [57]: d2
```

```
Out[57]: {'name': 'aditi'}
```

```
In [58]: s1="pwwskills"
```

```
In [59]: s1.count('l')
```

Out[59]: 2

In [60]: `s1.find('l')`

Out[60]: 5

In [61]: `s1.index('p')`

Out[61]: 0

In [62]: `s1.index('s')`

Out[62]: 2

In [63]: `s1.find('z')`

Out[63]: -1

In [64]: `s1.index('z')`

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[64], line 1  
----> 1 s1.index('z')  
  
ValueError: substring not found
```

In [65]: `s1`

Out[65]: 'pwskills'

In [66]: `s1.upper()`

Out[66]: 'PWSKILLS'

In [67]: `s1.lower()`

Out[67]: 'pwskills'

In [68]: `s1.title()`

Out[68]: 'Pwskills'

In [69]: `s2="My name ia aditi kulshrestha"`

In [70]: `s2.title()`

Out[70]: 'My Name Ia Aditi Kulshrestha'

In [71]: `s2.split()`

Out[71]: ['My', 'name', 'ia', 'aditi', 'kulshrestha']

```
In [72]: s3="my name,is ,aditi kulshrestha"
```

```
In [73]: s3.split('s')
```

```
Out[73]: ['my name,i', ' ',aditi kul', 'hre', 'tha']
```

```
In [74]: s1
```

```
Out[74]: 'pwwskills'
```

```
In [76]: s1.capitalize()
```

```
Out[76]: 'Pwwskills'
```

```
In [77]: s2
```

```
Out[77]: 'My name ia aditi kulshrestha'
```

```
In [78]: s2.capitalize()
```

```
Out[78]: 'My name ia aditi kulshrestha'
```

```
In [79]: s2.replace('a','d')
```

```
Out[79]: 'My ndme id dditi kulshresthd'
```

```
In [ ]:
```