

In [1]:

```
1 # Data Types
```

In [2]:

```
1 # Numerical:- Int,float,complex
2 # textual:- String
3 # tuple:- collection data type
```

In [6]:

```
1 # we can store any data type with in a tuple
2
3 students = ('Karan', 'Ajay', 'Mohit', 12, 23.6, 45-8j, (12, 45, 'Harry'))
4
5
6 print(type(students))
7 print(students)
```

```
<class 'tuple'>
('Karan', 'Ajay', 'Mohit', 12, 23.6, (45-8j), (12, 45, 'Harry'))
```

In [7]:

```
1 # list:- we have to square bracket for list
2
3 data = [12, 23.55, "karan", (1, 2, 3, 4), 78-9j, [1, 2, 3, 45]]
4
5 print(data)
```

```
[12, 23.55, 'karan', (1, 2, 3, 4), (78-9j), [1, 2, 3, 45]]
```

In [8]:

```
1 print(type(data))
```

```
<class 'list'>
```

In [9]:

```
1 # list:- is a mutable object/data types
2
3 # tuple is an immutable object /data types
```

```
In [10]: 1 # set :- is an unordered unique collection of data type
        2
        3 a = [1,1,1,111,12,1,1,12,2,2,22,32,3,3,3,334,4,4,4,4,5,5,556]
        4
        5 print(a)
```

```
[1, 1, 1, 111, 12, 1, 1, 12, 2, 2, 22, 32, 3, 3, 3, 334, 4, 4, 4, 4, 5, 5, 556]
```

```
In [11]: 1 # set data type
        2
        3 a = {1,1,1,111,12,1,1,12,2,2,22,32,3,3,3,334,4,4,4,4,5,5,556}
        4
        5 print(a)
```

```
{32, 1, 2, 3, 4, 5, 12, 556, 334, 111, 22}
```

```
In [14]: 1 a = {'Ajay','Ajay','Ajay','Ajay','Mohit','Ajay','Mohit','Ajay'}
        2
        3 print(a)
```

```
{'Ajay', 'Mohit'}
```

```
In [15]: 1 print(type(a))
```

```
<class 'set'>
```

```
In [19]: 1 a = [1,2,3,45,6]
        2
        3 print(type(a))
```

```
<class 'list'>
```

```
In [20]: 1 a = {1,1,1,12,2,2,2,3,3,34}
          2
          3 print(type(a))
```

```
<class 'set'>
```

```
In [21]: 1 # str
          2 # Numerical: int,float,complex
          3 # tuple,list,set
          4 # mapped data type:- dict
```

```
In [22]: 1 # dictionary data type/ mapped /key valued data type
          2
          3
          4 passwords = {"Mohit":1234,"Pamai":2345,'Age':23,'Class':12}
```

Cell In[22], line 4

```
passwords = {"Mohit",1234,"Pamai":2345,'Age':23,'Class':12}
```

^

**SyntaxError:** invalid syntax

```
In [23]: 1 pamai_details = {"Name":'Pamai','Age':23,'Addresss':'Noida','Salary':98987,'phone':9898787654}
          2
          3 print(pamai_details)
```

```
{'Name': 'Pamai', 'Age': 23, 'Addresss': 'Noida', 'Salary': 98987, 'phone': 9898787654}
```

```
In [24]: 1 print(type(pamai_details))
```

```
<class 'dict'>
```

```
In [27]: 1 # do not want to store any data with in a variable
          2
          3 data = None
          4
          5 print(data)
          6 print(type(data))
```

```
None
<class 'NoneType'>
```

```
In [28]: 1 help('keywords')
```

Here is a list of the Python keywords. Enter any keyword to get more help.

False	class	from	or
None	continue	global	pass
True	def	if	raise
and	del	import	return
as	elif	in	try
assert	else	is	while
async	except	lambda	with
await	finally	nonlocal	yield
break	for	not	

```
In [29]: 1 # bool data type
          2
          3 member = True
          4
          5 print(member)
```

```
True
```

```
In [30]: 1 print(type(member))
```

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

```
In [33]: 1 # bool data type
          2
          3 member = False
          4
          5 print(member)
```

False

```
In [34]: 1 # int,float,complex
          2 # str,tuple,list
          3 # set
          4 # dict
          5 # bool
          6
```

```
In [35]: 1 a = {1,2,34,5}
          2
          3 print(a)
```

{1, 2, 34, 5}

```
In [36]: 1 var = frozenset({1,2,3,45})
```

```
In [37]: 1 print(var)
```

frozenset({1, 2, 3, 45})

```
In [38]: 1 print(type(var))
```

<class 'frozenset'>

In [39]:

```
1 # int,float,complex
2 # str,tuple,list
3 # set
4 # dict
5 # bool
6 # None
7 #Frozenset
```

In [ ]:

```
1 # imp
2
3 # int,float,complex
4 # str,tuple,list
5 # set
6 # dict
7 # bool
8
```