▾ List and its default function

Definition : A list is a container which can hold different data types in it.

```
lst = ["Akash",1,3108,1267,123.78,[1,2,3]]
```

```
lst
```

⮕ ['akash', 1, 3108, 1267, 123.78, [1, 2, 3]]

```
['Akash',1,3108,12868,1224,[1,2,3]]
```

```
lst
```

⮕ ['akash', 1, 3108, 1267, 123.78, [1, 2, 3]]

```
lst[0]
```

⮕ 'akash'

```
lst[1]
```

⮕ 1

```
lst[4]
```

⮕ 123.78

▾ list is a complex data type which is derived from list object.

list elements are always stored in orderd sequence of number starting from 0,

Every object will have some method.

lst, append (" akash") # append actually adds the values in the end of the list

```
lst
```

> ['akash', 1, 3108, 1267, 123.78, [1, 2, 3]]

```
lst.index(1)
```

> 1

```
lst[-1]
```

> [1, 2, 3]

Dictionaries and its default function :-

this is key value pair data structure, it is complex, it is an object of DICT class in python.

Data is stored like ->

{"key ": "value "}

```
dit={"name":"akash" , "age":"20" , "number":1234, "email":"akashsmane@coep.sveri.ac.i
```

```
dit
```

> {'age': '20',
> 'email': 'akashsmane@coep.sveri.ac.in',
> 'name': 'akash',
> 'number': 1234}

retrieving a value from Dict

dit.get('name')

dit["name"]

> 'akash'

dit.items()

```
dit.items()
```

```
dict_items([('name', 'akash'), ('age', '20'), ('number', 1234), ('email', 'akash
```

```
dit.keys()
```

```
dict_keys(['name', 'age', 'number', 'email'])
```

```
dit.pop("name")
```

```
'akash'
```

```
dit
```

```
{'age': '20', 'email': 'akashsmane@coep.sveri.ac.in', 'number': 1234}
```

▾ adding a new elements t dict

```
dit["school"]= "KVS"
```

```
dit
```

```
{'age': '20', 'email': 'akashsmane@coep.sveri.ac.in', 'number': 1234}
```

```
type(dit)
```

```
dict
```

Sets and its default function:-

▾ sets are used for storing unique values in the python.,

Sets are complex data structure ,

Sets are a class in python , whos 0 object can be derived .

Set are mostly used for finding union , disjoin and finding commons and uncommon in the python data type .

```
st = {"letsupgrade",1,2,3,4,5,6,5,5}
```

```
st
```

⊐→ {1, 2, 3, 4, 5, 6, 'letsupgrade'}

```
st1 = {"letsupgrade",1}
```

```
st1.issubset(st)
```

⊐→ True

Tuple and explore default method

- Tuples are ordered immuatable collection of objects.

  once the data is written it's in the at for ever .

  It can be changed.

  Example?

```
tup = ("swami samarath","akash","@","letsupgrade.in")
```

```
tup
```

⊐→ ('swami samarath', 'akash', '@', 'letsupgrade.in')

```
tup.count("@")
```

⊐→ 1

```
tup.index("letsupgrade.in")
```

⊐→ 3

▾ String and explore default methods

Python string is a built in type text sequence.it is used to handle textual data in python. Python string are immutable sequence of unicode point.creating string are simplest and easy to use in python.

We can simply create python string by enclosing a text in single as well as double quotes. Python treat both single and double quotes statements same.

```
str1="apk"
str2="zube"


print(str1+str2)
```

⤷ apkzube