

Frozenset() → It is an inbuilt () which  
uses to change mutable values into  
immutable values i.e. → The elements  
of sets is not added or remove  
once created.

Syn:- `frozenset(iterable-object-name)`

Ex:-

`nu = {1, 2, 3, 4, 5, 6, 7, 8, 9}`

`frum = frozenset(nu)`

`print("frozenset object is :", frum)`

dp

frozenset object is : `frozenset({1, 2, 3, 4, 5, 6, 7, 8, 9})`



## Dictionary

It is a datatype which is used to store data values in Key: Value pairs.

- > A dictionary is a collection of data which is ordered, changeable and do not allow duplicates.

### Creating dictionary

Dict\_name = {Key: value}

### Operation performed in dictionary

#### Adding an item

→ Dict\_name[Key] = value

#### Changing value of an item

→ Dict\_name[existing-key] = new-value

- To get number of items in a dictionary

→ len(Dict\_name)

- Print only keys :-

→ Dict\_name.keys()

- Print only values

→ Dict\_name.values()



## Removing from dictionary :-

For removing we use following func.

1) Pop - This is use to remove the item with specified key name.

ex:-

# use of pop()

```
dog1 = {"name": "jack", "age": 15, "colour": "black", "height": 6, "weight": 65}
```

```
print(dog1)
```

```
dog1.pop("colour")
```

```
print(dog1)
```

O/P

```
{ "name": "jack", "age": 15, "colour": "black", "height": 6, "weight": 65 }
```

```
{ "name": "jack", - - - (colour) not }
```

2) popitem = This func is uses to remove the last inserted item.

ex:-

```
dog1.popitem()
```

```
print(dog1)
```

O/P

```
{ "name": "jack", "age": 15, "height": 6 }
```



Del → This <sup>keyword</sup> ~~function~~ deletes the item with specific key name.

Ex: —

```
del dog1['age']  
print(dog1)  
print(dog1)
```

O/P

{ 'name': 'Jack', 'height': 6 }

→ clear() → This function is used to clear all the items in the dictionary.

Ex: — dog1.clear()  
print(dog1) Ex: — {}

→ difference b/w Del and clear

del

clear

→ del is a keyword

i) ~~it~~ clear() is the own function of dictionary.

→ del can also delete the whole dictionary

ii) It will only clear the values stored in dictionary.

Ex: —

```
del dog1  
print(dog1)
```

↳ O/P

error because dog1 dictionary is not present

Ex: dog1.clear()

```
print(dog1)
```

O/P

{ }

↳ only values were deleted



## Program flow control :

### Condition Statement :

i) if

ii) if - else

iii) if - elif

iv) Nested if

i) if : — It check the condition if it is true then it will execute the statement.

→ The statement will be given with an indentation (space)

Ex: —

```
print ("enter age")
a = int(input())
```

```
if a > 18:
    print ("Can vote")
```

O/P

enter age : 19

19

Can vote.

ii) if - else : — If the condition is true then statement inside the if will be executed. Otherwise statement inside else will be executed.

→ if and else should have ""



Ex: -

```
print ("enter age")  
a = int(input())
```

```
if a >= 18:  
    print ("can vote")  
else:  
    print ("can not vote")
```

iii) if else :- This statement is used when you have more than one condition has to be checked.

Ex: -

```
print ("enter a number:")  
a = int(input())  
if a > 0:  
    print ("positive")  
elif a < 0:  
    print ("negative")  
else:  
    print ("The number is zero")
```

→ And, OR :-

'And' or 'OR' statement is used when we have to check two or more statement together.

→ And → if all the condition are satisfied it will return 'True' else return 'False'.

→ OR → It will return True if any condition is satisfied



Nested if :- If inside another if is known as nested if.

$x = 41$

if  $x > 10$ :

print ("Above ten")

if  $x > 20$ :

print ("and also above 20")

else:

print ("but not above 20")