Python Objects

Mutable
1. list
2. dictinory
3. set

Immutable
1. numeric
2. tuple
3. string
4. frozenset
5. Boolean

Numeric:------

Integer:---

```
my_int1 = 10
my_int2 = 10
print(id(my_int1),id(my_int2))
```

(140707225601224 140707225601224)

Same memory address

That means immutable object

Float:----

```
my_float1 = 10.5
my_float2 = 10.5

print(id(my_float1),id(my_float2))
```

(1740399292944 1740399292944)

(Same memory address)

Immutable object

Complex:---

```
my_comp1 = 10.5+3j
my_comp2 = 10.5+3j

print(id(my_comp1),id(my_comp2))
```

(3039707779024 3039707779024)
(Same memory address)

Immutable object

String:---

```
my_str1 = 'Neeraj'
my_str2 = 'Neeraj'
print(id(my_str1),id(my_str2))
```

Same memory address
(2421953832800 2421953832800)

That means immutable object

List:----

```
my_list1 = ['Neeraj','jai']
my_list2 = ['Neeraj','jai']
print(id(my_list1),id(my_list2))
```

(2070751895616 2070752043520)
Different memory address

That means mutable object

Tuple:---

```
my_tup1 = ('Neeraj','jai')
my_tup2 = ('Neeraj','jai')

print(id(my_tup1),id(my_tup2))
          |          |
          ------------
               |
(1607757822976 1607757822976)
     Same memory address
               |
     That means immutable object
```

Dictionary:---

```
my_dict1 = {'name':'Neeraj','age':37}
my_dict2 = {'name':'Neeraj','age':37}

print(id(my_dict1),id(my_dict2))
          |          |
          ------------
               |
(2084796816704 2084797210368)
     Different memory address
               |
     That means mutable object
```

Set: ---

```
my_set1 = {'name','Neeraj','age',37}
my_set2 = {'name','Neeraj','age',37}

print(id(my_set1),id(my_set2))
          |          |
          ------------
               |
(2485072560864 2485072845888)
     Different memory address
               |
```

That means mutable object

Frozenset:---

```
my_fset1 =frozenset({'name','Neeraj','age',37})
my_fset2 = frozenset({'name','Neeraj','age',37})

print(id(my_fset1),id(my_fset2))
```

Immutable object

Boolean:----

```
my_bool1 = True
my_bool2 = True

print(id(my_bool1),id(my_bool2))
```

(140707224715696 140707224715696)

(Same memory address)

Immutable object