In [3]:
```
## task -14     sets {}

s=set()
print(type(s))
```

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

In [10]:
```
s={24,32,34,'hai',34}
s
```

Out[10]:
```
{24, 32, 34, 'hai'}
```

In [6]:
```
s[0]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-6-c9c96910e542> in <module>
----> 1 s[0]

TypeError: 'set' object is not subscriptable
```

In [9]:
```
s.add('rain')
s
```

Out[9]:
```
{24, 32, 34, 'hai', 'platform', 'rain', 'raju'}
```

In [13]:
```
s.clear()
s
```

Out[13]:
```
set()
```

In [15]:
```
s={24, 32, 34, 'hai', 'platform', 'rain', 'raju'}
s.copy()
s
```

Out[15]:
```
{24, 32, 34, 'hai', 'platform', 'rain', 'raju'}
```

In [29]:
```
s={24, 32, 34, 'hai', 'platform', 'rain', 'raju'}
s.pop()
s
```

Out[29]:
```
{24, 34, 'hai', 'platform', 'rain', 'raju'}
```

In [36]:
```
s={24, 32, 34, 'hai', 'platform', 'rain', 'raju'}
s.remove('hai')
```

In [43]:
```
s.update('a','b')
s
```

Out[43]: {24, 32, 34, 'a', 'b', 'platform', 'rain', 'raju'}

In [44]:
```
# set operations
s1={1,2,3,4,5,6}
s2={5,6,7,8,9,10,11,12}
s1.union(s2)
```

Out[44]: {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}

In [45]:
```
s1.intersection(s2)
```

Out[45]: {5, 6}

In [46]:
```
s1.difference(s2)
```

Out[46]: {1, 2, 3, 4}

In [56]:
```
s1={1,2,3,4,5,6}
s2={5,6,7,8,9,10,11,12}
s1.symmetric_difference(s2)
```

Out[56]: {1, 2, 3, 4, 7, 8, 9, 10, 11, 12}

In [58]:
```
s1.issubset(s2)
```

Out[58]: False

In [61]:
```
s1={'a','b','c'}
s2={'a'}
s1.issuperset(s2)
```

Out[61]: True

In [62]:
```
s2.issuperset(s1)
```

Out[62]: False

In [63]:
```
s1.isdisjoint(s2)
```

Out[63]: False

In [ ]:
```
## dictionary
```

In [21]:
```
hotel={'name':'croods','seats':80,'tables':16}
hotel['name']
```

Out[21]:
```
'croods'
```

In [29]:
```
hotel.keys()
```

Out[29]:
```
dict_keys(['name', 'seats', 'tables'])
```

In [31]:
```
hotel.values()
```

Out[31]:
```
dict_values(['croods', 80, 16])
```

In [43]:
```
hotel={'name':'croods','seats':80,'tables':[16,18]}
h=hotel.get('tables')
h[1]
```

Out[43]:
```
18
```

In [44]:
```
hotel.items()
```

Out[44]:
```
dict_items([('name', 'croods'), ('seats', 80), ('tables', [16, 18])])
```

In [59]:
```
hotel={'name':'croods','seats':80,'tables':16}
hotel.update({'add':'dishes'})
hotel
```

Out[59]:
```
{'name': 'croods', 'seats': 80, 'tables': 16, 'add': 'dishes'}
```

In [72]:
```
hotel={'name':'croods','seats':80,'tables':16}
hotel['name']='punjabi'
hotel
```

Out[72]:
```
{'name': 'punjabi', 'seats': 80, 'tables': 16}
```

In [77]:
```
hotel={'name':'croods','seats':80,'tables':16}
hotel.pop('seats')
```

Out[77]:
```
80
```

In [72]:
```
hotel={'name':'croods','seats':80,'tables':16}
hotel['name']='punjabi'
hotel
```

Out[72]:
```
{'name': 'punjabi', 'seats': 80, 'tables': 16}
```

In [77]:
```
hotel={'name':'croods','seats':80,'tables':16}
hotel.pop('seats')
```

Out[77]:
```
80
```

In [82]:
```
hotel={'name':'croods','seats':80,'tables':16}

for i in hotel:
    print(i)
```

```
name
seats
tables
```

In [80]:
```
hotel={'name':'croods','seats':80,'tables':16}
for i in hotel.values():
    print(i)
```

```
croods
80
16
```

In [84]:
```
for i in hotel.items():
    print(i)
```

```
('name', 'croods')
('seats', 80)
('tables', 16)
```