Assignments 5

Dictionary

```
In [1]: d={}
         type(d)
 Out[1]: dict
 In [2]: d1={"name":"mahesh", "age":45, "city":"HYD"}
 Out[2]: {'name': 'mahesh', 'age': 45, 'city': 'HYD'}
 In [5]: d2={1:"On",2:"To",3:"tree"}
 Out[5]: {1: 'On', 2: 'To', 3: 'tree'}
 In [6]: d3={"name":"narsimha", "gender": "male", "employees": "no"}
 Out[6]: {'name': 'narsimha', 'gender': 'male', 'employees': 'no'}
 In [7]: d1.keys() # KEYS= Lables
 Out[7]: dict_keys([1, 2, 3])
 In [8]: d1.values()
 Out[8]: dict_values(['On', 'To', 'tree'])
 In [9]: d2.keys() # KEYS= lables
Out[9]: dict_keys([1, 2, 3])
In [10]: d2.values()
Out[10]: dict_values(['On', 'To', 'tree'])
In [11]: d3.keys() # KEYS= Lables
Out[11]: dict_keys(['name', 'gender', 'employees'])
In [12]: d3.values()
Out[12]: dict_values(['narsimha', 'male', 'no'])
In [15]: d1.items() # it return key pair values
Out[15]: dict_items([(1, 'On'), (2, 'To'), (3, 'tree')])
```

```
In [16]: d2.items() # it return key pair values
Out[16]: dict_items([(1, 'On'), (2, 'To'), (3, 'tree')])
In [17]: d3.items() # it return key pair values
Out[17]: dict_items([('name', 'narsimha'), ('gender', 'male'), ('employees', 'no')])
In [19]: | d1={1:"Name",2:"age" ,"city":["hyd","chenai" ,"bengulu"] } # list in dic
Out[19]: {1: 'Name', 2: 'age', 'city': ['hyd', 'chenai', 'bengulu']}
In [20]: | d1={1:"Name",2:"age" ,"city":["hyd","chenai" ,"bengulu"],"interest":["games","sl
Out[20]: {1: 'Name',
          2: 'age',
           'city': ['hyd', 'chenai', 'bengulu'],
           'interest': ['games', 'sleep']}
In [28]: d1={1:"Name",2:"age" ,"city":{"hyd","chenai" ,"bengulu"},"interest":["games","sl
Out[28]: {1: 'Name',
           2: 'age',
           'city': {'bengulu', 'chenai', 'hyd'},
           'interest': ['games', 'sleep']}
```

shallow copying of a mutable list object

```
keys={"country","city","age"}
In [22]:
         d4=dict.fromkeys(keys)
Out[22]: {'country': None, 'city': None, 'age': None}
In [25]: keys={"country","city","age"}
         values=["japanese","maxico",12]
         d4=dict.fromkeys(keys, values)
Out[25]: {'country': ['japanese', 'maxico', 12],
          'city': ['japanese', 'maxico', 12],
          'age': ['japanese', 'maxico', 12]}
In [27]: values.append("mahesh")
Out[27]: {'country': ['japanese', 'maxico', 12, 'mahesh'],
          'city': ['japanese', 'maxico', 12, 'mahesh', 'mahesh'],
          'age': ['japanese', 'maxico', 12, 'mahesh', 'mahesh']}
In [29]: d2
Out[29]: {1: 'On', 2: 'To', 3: 'tree'}
```

```
In [30]: d2[2] # it return the values of given key
Out[30]: 'To'
In [32]: d2.get(1) # it return keys to given values
Out[32]: 'On'
In [33]: d4
Out[33]: {'country': ['japanese', 'maxico', 12, 'mahesh', 'mahesh'],
           'city': ['japanese', 'maxico', 12, 'mahesh', 'mahesh'],
           'age': ['japanese', 'maxico', 12, 'mahesh', 'mahesh']}
In [91]: d2={"name":"veera", "age":456, "dob":1999, "city":"veerahyd"}
In [92]: d2["name"]
Out[92]: 'veera'
In [93]: d2["age"]
Out[93]: 456
In [94]: d2["dob"]
Out[94]: 1999
In [95]: d2["city"]
Out[95]: 'veerahyd'
In [96]: d2
Out[96]: {'name': 'veera', 'age': 456, 'dob': 1999, 'city': 'veerahyd'}
```

Update the dictionary

```
In [97]: update={"code":1234567}
d2.update(update)
d2

Out[97]: {'name': 'veera', 'age': 456, 'dob': 1999, 'city': 'veerahyd', 'code': 1234567}

In [98]: d2

Out[98]: {'name': 'veera', 'age': 456, 'dob': 1999, 'city': 'veerahyd', 'code': 1234567}

In [99]: update1={"job":"self Business"}
d2.update(update1)
d2
```

```
Out[99]: {'name': 'veera',
            'age': 456,
            'dob': 1999,
            'city': 'veerahyd',
            'code': 1234567,
            'job': 'self Business'}
          d2["country"]="india"
In [100...
Out[100...
           {'name': 'veera',
            'age': 456,
            'dob': 1999,
            'city': 'veerahyd',
            'code': 1234567,
            'job': 'self Business',
            'country': 'india'}
```

delete the dictionary

```
In [101...
           d2.pop("job") # removes values passed in the function
           d2
Out[101...
           {'name': 'veera',
            'age': 456,
            'dob': 1999,
            'city': 'veerahyd',
            'code': 1234567,
            'country': 'india'}
In [102...
          d2.popitem() #removes a random item from the dictionary
Out[102...
          {'name': 'veera', 'age': 456, 'dob': 1999, 'city': 'veerahyd', 'code': 1234567}
          del[d2["name"]]
In [103...
          {'age': 456, 'dob': 1999, 'city': 'veerahyd', 'code': 1234567}
Out[103...
In [104...
          d2.clear()
           d2
Out[104...
           {}
In [129...
          del d2
          d2 # deleted completly
In [130...
         NameError
                                                     Traceback (most recent call last)
         Cell In[130], line 1
         ----> 1 d2
         NameError: name 'd2' is not defined
```

```
d2={"name":"mahesh", "age":45, "dob":20000 , "city":"HYD"}
In [110...
Out[110...
           {'name': 'mahesh', 'age': 45, 'dob': 20000, 'city': 'HYD'}
In [115...
           d3=d2.copy()
           {'name': 'mahesh', 'age': 45, 'dob': 20000, 'city': 'HYD', 'country': 'india'}
Out[115...
           id(d2) ,id(d3) # diction doesnot provide any reusablity
In [116...
          (2107854456320, 2107852643392)
Out[116...
           d2["country"]="india"
In [117...
           d2
          {'name': 'mahesh', 'age': 45, 'dob': 20000, 'city': 'HYD', 'country': 'india'}
Out[117...
In [118...
           d3
Out[118...
           {'name': 'mahesh', 'age': 45, 'dob': 20000, 'city': 'HYD', 'country': 'india'}
           for i in d2:
In [119...
               print(i)
         name
         age
         dob
         city
         country
In [120...
          for i in enumerate(d2) :
               print(i)
         (0, 'name')
         (1, 'age')
         (2, 'dob')
         (3, 'city')
         (4, 'country')
In [121...
          d2
Out[121...
          {'name': 'mahesh', 'age': 45, 'dob': 20000, 'city': 'HYD', 'country': 'india'}
           "USA" in d2
In [123...
Out[123...
           False
In [125...
           "country" in d2 # it check whether the key is present or not
Out[125...
           True
In [126...
           all(d2) #Return True if bool(x) is True for all values x in the iterable.
           #If the iterable is empty, return True.
```

```
Out[126... True

In [127... any(d2) #Return True if bool(x) is True for any x in the iterable.

#If the iterable is empty, return False.

Out[127... True

In []:
```