

Assignment 5 191109007

Ques 1

In [2]:

```
t3=('a','b','c','d','e')
t3[1]='B'
t3=('A',)+t3[1:]
print(t3)
```

```
-----
TypeError                                 Traceback (most recent call last)
<ipython-input-2-7628d61a407c> in <module>
      1 t3=('a','b','c','d','e')
----> 2 t3[1]='B'
      3 t3=('A',)+t3[1:]
      4 print(t3)
```

TypeError: 'tuple' object does not support item assignment

Ques 1: Tuple doesn't allow to change value, so error occurred

Ques 2

In [3]:

```
t1=('p','y','t','h','o','n','p','r','o','g','r','a','m')
#count
print('No of p in the list: ',t1.count('p'))
#index
print('Index number in which y is placed: ',t1.index('y'))
print('Index number in which h is placed: ',t1.index('h'))
```

No of p in the list: 2
Index number in which y is placed: 1
Index number in which h is placed: 3

Dictionary

Ques 3

In [4]:

```
#dictionary with integer keys
my_dict={1:'apple',2:'ball'}
print(my_dict)
print(my_dict[2])
```

```
{1: 'apple', 2: 'ball'}
ball
```

Ques 4

In [5]:

```
#dictionary with mixed keys
my_dict={'Name':'John',1:[2,4,3]}
print(my_dict)
print(my_dict['Name'])
print(my_dict[1])
```

```
{'Name': 'John', 1: [2, 4, 3]}
John
[2, 4, 3]
```

Ques 5

In [6]:

```
my_dic={(1,2,3):"abc",3.14:"abc"}
print(my_dic)
```

```
{(1, 2, 3): 'abc', 3.14: 'abc'}
```

Ques 6

In [7]:

```
#using dict()
my_dict=dict({1:'apple',2:'ball'})
print(my_dict)
```

```
{1: 'apple', 2: 'ball'}
```

Ques 7

In [8]:

```
my_dict={'Name':'Ram','Age':21}
print(my_dict)
print(my_dict.get('Name'))#Retrieves the value of Name key
my_dict['Age']=23 #update value
print(my_dict)
my_dict['Dept']='CSE' #add item
print(my_dict)
```

```
{'Name': 'Ram', 'Age': 21}
Ram
{'Name': 'Ram', 'Age': 23}
{'Name': 'Ram', 'Age': 23, 'Dept': 'CSE'}
```

Ques 8

In [9]:

```
squares={1:1,2:4,3:9,4:16,5:25}
print(squares)
print(squares.pop(3))#removes a particular item
print(squares)
print(squares.popitem())#removes an arbitrary item
print(squares)
del squares[5] #delete a particular item
squares.clear() #remove all items
print(squares)
```

```
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25}
9
{1: 1, 2: 4, 4: 16, 5: 25}
(5, 25)
{1: 1, 2: 4, 4: 16}
```

```
-----
KeyError                                Traceback (most recent call last)
<ipython-input-9-488b4eba3e10> in <module>
      5 print(squares.popitem())#removes an arbitrary item
      6 print(squares)
----> 7 del squares[5] #delete a particular item
      8 squares.clear() #remove all items
      9 print(squares)
```

KeyError: 5

by pop item an arbitrary item gets removed and that item removed here is 5 so when we enter code to delete 5, key error occurs because 5 is already being removed from the list

Ques 8: entering 4 to delete, i.e.,del squares[4], to check the other function's operation

In [10]:

```
del squares[4] #delete a particular item
squares.clear() #remove all items
print(squares)
```

```
{}
```

Ques 9 - Sorting a Dictionary

In [20]:

```
marks={}
marks['Math','English','Science']=0
marks
for item in marks.items():
    print(item)
for i in sorted(marks.keys()):
    print(i)
```

```
(('Math', 'English', 'Science'), 0)
('Math', 'English', 'Science')
```

Ques 10 - Iterating through a dictionary

In [21]:

```
squares={1:1,2:4,3:9,4:16,5:25}
for i in squares:
    print(squares[i])
```

```
1
4
9
16
25
```

In []: