```
In [1]:
list1=['vaishnavi', 'rohitha', 'himalaya', 'roshni', 'nikitha', 14, 22, 11, 51, 15, 'cse', 'ece',
'mech', 'aero', 'eee', 9.2, 10, 8.7, 9.6, 9.5]
In [2]:
list1
Out[2]:
['vaishnavi',
 'rohitha',
 'himalaya',
 'roshni',
 'nikitha',
 14,
 22,
 11,
 51,
 15,
 'cse',
 'ece',
 'mech',
 'aero',
 'eee',
 9.2,
 10,
 8.7,
9.6,
9.5]
In [4]:
list1.append('srinija')
```

```
In [5]:
list1
Out[5]:
['vaishnavi',
 'rohitha',
 'himalaya',
 'roshni',
 'nikitha',
 14,
 22,
 11,
 51,
 15,
 'cse',
 'ece',
 'mech',
 'aero',
 'eee',
 9.2,
 10,
 8.7,
9.6,
 9.5,
 'srinija']
In [6]:
list1.append(32)
In [7]:
list1
Out[7]:
['vaishnavi',
 'rohitha',
 'himalaya',
 'roshni',
 'nikitha',
 14,
 22,
 11,
 51,
 15,
 'cse',
 'ece',
 'mech',
 'aero',
 'eee',
 9.2,
 10,
 8.7,
 9.6,
 9.5,
 'srinija',
 32]
```

```
In [9]:
list1.append('aerospace')
In [10]:
list1
Out[10]:
['vaishnavi',
 'rohitha',
 'himalaya',
 'roshni',
 'nikitha',
 14,
 22,
 11,
 51,
 15,
 'cse',
 'ece',
 'mech',
 'aero',
 'eee',
 9.2,
 10,
 8.7,
9.6,
 9.5,
 'srinija',
 32,
 'aerospace']
In [11]:
list1.append(9.4)
```

```
In [12]:
list1
Out[12]:
['vaishnavi',
 'rohitha',
 'himalaya',
 'roshni',
 'nikitha',
 14,
 22,
 11,
 51,
 15,
 'cse',
 'ece',
 'mech',
 'aero',
 'eee',
 9.2,
 10,
 8.7,
 9.6,
 9.5,
 'srinija',
 'aerospace',
 9.4]
```

```
In [13]:
region1=[100,200,900,599,450,789,465,345,123,356,236,675]
In [14]:
```

```
region2=[300,400,466,390,266,736,657,354,423,746,857,456]
```

```
In [23]:
region2.extend([region1])
```

In [25]:

region2

Out[25]:

[300,

400,

466,

390,

266,

100,

200,

900,

599,

450,

300,

400,

466,

390,

266,

300,

400,

466,

390,

266,

300,

400,

466,

390,

266, 100,

200,

900,

599,

450,

300,

400,

466, 390,

266,

300,

400,

466, 390,

266, 300,

400,

466,

390,

266,

[100,

200, 900,

599,

450,

300,

400,

466, 390,

266,

300,

400,

466, 390,

```
266,
300,
400,
466,
390,
266]]
```

```
In [28]:
list2=['nikky','vaishu','sweety','vaishu','pinky',12,22,34,45,67]
In [29]:
list2.index('vaishu',2)
Out[29]:
3
In [30]:
list2
Out[30]:
['nikky', 'vaishu', 'sweety', 'vaishu', 'pinky', 12, 22, 34, 45, 67]
question4
In [39]:
list3=['apple','orange','banana','kiwi','mango']
In [40]:
list3
Out[40]:
['apple', 'orange', 'banana', 'kiwi', 'mango']
In [41]:
 list3.append('grapes')
In [42]:
list3
Out[42]:
['apple', 'orange', 'banana', 'kiwi', 'mango', 'grapes']
```

```
In [43]:
list3.extend(['watermelon', 'muskmelon'])
In [44]:
list3
Out[44]:
['apple',
 'orange',
 'banana',
 'kiwi',
 'mango',
 'grapes',
 'watermelon',
 'muskmelon']
In [47]:
list3.insert(4,'iceapple')
In [48]:
list3
Out[48]:
['apple',
 'orange',
 'banana',
 'kiwi',
 'iceapple',
 'mango',
 'grapes',
 'watermelon',
 'muskmelon']
```

question5 pop and removing 2nd element

```
In [49]:
list4=[1,3,4,7,8]

In [50]:
list4.pop()
Out[50]:
8
```

```
In [51]:
list4
Out[51]:
[1, 3, 4, 7]
In [52]:
list4.remove(3)
In [53]:
list4
Out[53]:
[1, 4, 7]
In [54]:
list4=[3,4,6,2,9,4]
In [55]:
list4.count(4)
Out[55]:
2
question6
In [56]:
list5=[300,564,879,576,345]
In [57]:
list5.sort()
In [58]:
list5
Out[58]:
[300, 345, 564, 576, 879]
In [59]:
list5.sort(reverse=True)
```

```
In [60]:
list5
Out[60]:
[879, 576, 564, 345, 300]
question7
In [61]:
11=[1,2,3,4,5,6,7,8,9,10]
In [62]:
11[0::2]
Out[62]:
[1, 3, 5, 7, 9]
In [63]:
11[1::2]
Out[63]:
[2, 4, 6, 8, 10]
question8
In [64]:
region1=(127,456,346,489,435,897,546,243,765,763,867,456)
In [65]:
region1
Out[65]:
(127, 456, 346, 489, 435, 897, 546, 243, 765, 763, 867, 456)
In [66]:
region2=(1,2,3,4,5,6)
In [67]:
```

region1+=(region2)

```
In [68]:
region1
Out[68]:
(127, 456, 346, 489, 435, 897, 546, 243, 765, 763, 867, 456, 1, 2, 3, 4,
question9
In [75]:
t2=('ritu', 'sai', 'leela', 'srinivas', 'mani', 'sow', 'sita', 'geeta', 'ram', 'ritu')
In [76]:
t2
Out[76]:
('ritu',
 'sai',
 'leela',
 'srinivas',
 'mani',
 'sow',
 'sita',
 'geeta',
 'ram',
 'ritu')
In [74]:
t2.count('ritu')
Out[74]:
2
question10
In [77]:
quater1=(123,654,987,567,354)
In [78]:
quater1
Out[78]:
(123, 654, 987, 567, 354)
In [79]:
```

quater2=(435,746,564,345,276)

```
In [80]:
quater2
Out[80]:
(435, 746, 564, 345, 276)
In [81]:
max(quater1)
Out[81]:
987
In [82]:
max(quater2)
Out[82]:
746
question11
In [83]:
employeedictionary={'employee name':'vaishu','employee id':12,'employee department':'ec
e'}
In [85]:
employeedictionary.keys()
Out[85]:
dict_keys(['employee name', 'employee id', 'employee department'])
In [86]:
employeedictionary.items()
Out[86]:
dict_items([('employee name', 'vaishu'), ('employee id', 12), ('employee d
epartment', 'ece')])
In [91]:
employeedictionary['employee department']
Out[91]:
'ece'
```

region2=set([13,14,15,16,17,18,19,20,21,22,23,24,25,26,27])

```
In [99]:
region1={'jan':150,'feb':340,'mar':450}
In [100]:
region2={'apr':459,'may':675,'jun':478}
In [101]:
region1.update(region2)
In [102]:
region1
Out[102]:
{'jan': 150, 'feb': 340, 'mar': 450, 'apr': 459, 'may': 675, 'jun': 478}
question13
In [103]:
region1=set([1,2,3,4,5,6,7,8,9,10,11,12])
In [104]:
region1
Out[104]:
{1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
In [105]:
```

In [106]:

```
region1.union(region2)
Out[106]:
{1,
 2,
 3,
 4,
 5,
 6,
 7,
 8,
 9,
 10,
 13,
 14,
 15,
 16,
 17,
 18,
 19,
 20,
 21,
 22,
 23,
 24,
 25,
 26,
 27}
In [ ]:
```