1) Select all the correct options to join two lists.

```
listOne =  ['a', 'b', 'c', 'd']
listTwo =  ['e', 'f', 'g']
```

a) newList = listOne + listTwo
b) newList = extend(listOne, listTwo)
c) newList = listOne.extend(listTwo)
d) newList.extend(listOne, listTwo)

In [1]:

```
listOne =  ['a', 'b', 'c', 'd']
listTwo =  ['e', 'f', 'g']
newList = listOne + listTwo
print(newList)
```

```
['a', 'b', 'c', 'd', 'e', 'f', 'g']
```

In [2]:

```
newList1 = listOne.extend(listTwo)
print(newList)
```

```
['a', 'b', 'c', 'd', 'e', 'f', 'g']
```

Ans: a) newList = listOne + listTwo
c) newList = listOne.extend(listTwo)

2) Create an list of elements and execute the following functions: reverse, append, extend, count,sort.

Reverse

In [9]:

```
#input list
list=['Dollar', 'Euro', 'Pound']
#To reverse List
print('Original List:', list)
# List Reverse
list.reverse()
print('Updated List:', list)
```

```
Original List: ['Dollar', 'Euro', 'Pound']
Updated List: ['Pound', 'Euro', 'Dollar']
```

Append

In [8]:

```
list1=['Dollar', 'Euro', 'Pound']
print('Original List:', list1)
# append 'Yen' to the list
list1.append('Yen')
print('Updated List:', list1)
```

```
Original List: ['Dollar', 'Euro', 'Pound']
Updated List: ['Dollar', 'Euro', 'Pound', 'Yen']
```

Extend

In [10]:

```
# languages list
List_1=['Dollar', 'Euro', 'Pound']

# another list of Currencies
List_2=['Dinar', 'Lek', 'Indian Rupee']

# appending List_1 elements to List_2
List_1.extend(List_2)


print('Currency List:', List_1)
```

```
Currency List: ['Dollar', 'Euro', 'Pound', 'Dinar', 'Lek', 'Indian Rupee']
```

count

In [11]:

```
vowels = ['a', 'e', 'i', 'o', 'i', 'u']

# count element 'i'
count = vowels.count('i')
# print count
print('The count of i is:', count)
# count element 'p'
count = vowels.count('p')
# print count
print('The count of p is:', count)
```

```
The count of i is: 2
The count of p is: 0
```

Sort

In [17]:

```
vowels = ['e', 'a', 'u', 'o', 'i']
# sort the vowels
vowels.sort()
# print vowels
print('Sorted list (in Ascending):', vowels)
vowels.sort(reverse=True)
# print vowels
print('Sorted list(in Descending):', vowels)
```

```
Sorted list (in Ascending): ['a', 'e', 'i', 'o', 'u']
Sorted list(in Descending): ['u', 'o', 'i', 'e', 'a']
```

3) Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']
Expected Output : ['Green', 'White', 'Black']

In [18]:

```
color = ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']
color = [x for (i,x) in enumerate(color) if i not in (0,4,5)]
print(color)
```

```
['Green', 'White', 'Black']
```

4) What is the output of the following list operation

In [19]:

```
aList = [10, 20, 30, 40, 50, 60, 70, 80]
print(aList[2:5])
print(aList[:4])
print(aList[3:])
```

```
[30, 40, 50]
[10, 20, 30, 40]
[40, 50, 60, 70, 80]
```

5) Select all the correct options to copy a list

```
aList = ['a', 'b', 'c', 'd']
```

a) newList = copy(aList)
b) newList = aList.copy()
c) newList.copy(aList)
d) newList = list(aList)

In [21]:

```
aList = ['a', 'b', 'c', 'd']
newList = aList.copy()
print(newList)
```

```
['a', 'b', 'c', 'd']
```

Ans:b)newList = aList.copy()

6) Create an list of elements and slice & dice it.

In [28]:

```
areas = ["hallway", 11.25, "kitchen", 18.0, "living room", 20.0, "bedroom", 10.75, "bathroo
downstairs = areas[:6]
upstairs = areas[6:]
print(downstairs)
print(upstairs)
```

```
['hallway', 11.25, 'kitchen', 18.0, 'living room', 20.0]
['bedroom', 10.75, 'bathroom', 9.5]
```

7) Given a Python list you should be able to display Python list in the following order

aLsit = [100, 200, 300, 400, 500]

In [29]:

```
aLsit  = [100, 200, 300, 400, 500]
aLsit .reverse()
print(aLsit )
```

```
[500, 400, 300, 200, 100]
```

8) What will be the output of the following code snippet?

In [30]:

```
a=[1,2,3,4,5]
print(a[3:0:-1])
```

```
[4, 3, 2]
```

9) Add item 7000 after 6000 in the following Python List

list1 = [10, 20, [300, 400, [5000, 6000], 500], 30, 40]

In [31]:

```
list1 = [10, 20, [300, 400, [5000, 6000], 500], 30, 40]
list1[2][2].append(7000)
print(list1)
```

```
[10, 20, [300, 400, [5000, 6000, 7000], 500], 30, 40]
```