

```

In [24]: #list in python
         #append()
         #sort()
         #bubble_sort()
         l=[]
         m = int(input("Enter the length of the list:"))
         def demo(l):
             for i in range(0,m):
                 k=int(input("Enter elements:"))
                 l.append(k)
             for j in range(m):
                 for h in range(m):
                     #compare
                     if l[j]<l[h]:
                         #swap
                         temp=l[j]
                         l[j]=l[h]
                         l[h]=temp

         demo(l)
         print(l)

```

```

Enter the length of the list:4
Enter elements:45
Enter elements:89
Enter elements:23
Enter elements:56
[23, 45, 56, 89]

```

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In [30]: #deletion of items in alist
         l=[1,2,3,4,5]
         k=int(input("Enter position:"))
         del l[k]
         print(l)

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Enter position:2
[1, 2, 4, 5]

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In [4]: #deletion algorithm without del[index]
         # [0 1 2 3 4]the positions
         j=[1,2,3,4,5]
         p=len(j)
         pos=int(input("Enter the position:"))
         for i in range(pos,len(j)-1):
             print(i)
             j[i]=j[i+1]
         del j[len(j)-1] #delete the last value

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print(j)
```

Enter the position:3

3

```
[1, 2, 3, 5]
```

In []:

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In [35]: list=[1,2,3,4,5]
         #delete the values that are odd
         for i in range(len(list)-1):
             print(list[i]%2)
         print(list)
```

1

0

1

0

```
[1, 2, 3, 4, 5]
```

```
In [22]: #LIST AND THE RANDOM MODULE
         #functions
         #choice(list_name)-->picks a random item from l
         #sample(list_name,number)-->picks a group of random items from l
         #shuffle(list_name)-->shuffles the items of l
         from random import*
         names=["a","b","c","d","e"]
         #choice()
         curr_player=choice(names)
         print("the char chosen is:",curr_player)
         #sample()
         team=sample(names,2)
         print("the team is:",team)
         #shuffle()
         shuffle(names)
         print("the shuffle is:",names)
```

the char chosen is: c

the team is: ['c', 'a']

the shuffle is: ['c', 'd', 'e', 'b', 'a']

```
In [24]: #split() method
         #it returns a list of words of a string
         #the method assumes that the words are separated by whitespace
         s="Iam a kenyan citizen!"
         sp=s.split()
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print(sp)#a list of characters will be created
['Iam', 'a', 'kenyan', 'citizen!']
```

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In [27]: #join()
         #this is the opposite of split
         # It is a string method that takes a list
         #of strings and joins them together into a single string
l=["A","B","C","D"]
j=""#remove the commas and rejoin the string to one
l=j.join(l)
print(l)
```

ABCD

```
In [3]: #anagram
from random import*
w=input("Enter a word:")
#convert the word to a list
#use the list function
word=list(w)#convert to list
shuffle(word)#shuffle it
j=''#no space
word=j.join(word)#join the list
print(word)
```

Enter a word:GOD  
DOG

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In [:] #LIST COMPREHENSION
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In [:]
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