<u>Assignment : 1 LISTS</u>

1 Write a program to find minimum element from a list of elements along with its index in the list.

2 Write a program to calculate mean of a given list of numbers.

3 Write a program to search for an element in a given list of numbers.

4 Write a program to count frequency of a given element in a list of numbers.

5 Write a program to calculate the sum of integers of the list.

6. Write the most appropriate function to perform the following tasks.

> i)   Delete a given element from the list.
>
> ii) Add an element in the end of list.
>
> iii) Remove all items from the dictionary
>
> iv) To display list of values in a dictionery

7. Write a Python program to sum all the items in a list.

8. Write a Python program to multiplies all the items in a list.

9.Write a Python program to get the largest number from a list.

10.Write a Python program to get the smallest number from a list.

11. What will be the output of the following code?

```
data = [x for x in range(5)]
temp = [x for x in range(7) if x in data and x%2==0]
print(temp)
```

12. Predict the output based the questions:

```
T = [1, 2, 3, 4, 5, 6, 7, 8]
print(T[T.index(5)],end=" ")
print(T[T[T[6]-3]-6])
print(T.pop(-3))
print(T.remove(T[0]))
print(T)
```

13. Rewrite the code and underline the correction(s) if any .

```
X=['x','y','correct',[2,3,4],45]
for I in range[Len(X)] :
        if  X[1,0]=X[len(X)-1] :
        X[I]+=1
print(X[])
```

14. Find the output of the following code segment:

```
list1 = ['physics', 'chemistry', 1997, 2000]

list2 = [1, 2, 3, 4, 5, 6, 7 ]
  print "list1[0]: ", list1[0]      #statement 1
print "list1[0]: ", list1[-2]      #statement 2
print "list1[-2]: ", list1[1:]     #statement 3
print "list2[1:5]: ", list2[1:5]   #statement 4
```

15. Predict the output :

```
L=["Class","XI","has",["CS","IP"],"in","the","subject","computer","science"]
print (L[6:])
print (L[3][1].lower())
print (L[::2])
print ("in"in L)
print (L[5][:2]+L[7][1:])
print (L[3][::-1]) [2]
```

16. Write a Python program to generate and print a list of first and last 10 elements where the values are square of numbers between 1 and 50 (both included).

17. Create a list that contains the names of 10 students of your class. (Do not ask for input to do so). Perform the following on the list.

(i) Ask the user to input one name and append it to the list.

(ii) Ask user to input a number. Print the name that has the number as index. (Generate error message if the number provided is more than last index value).

(iii) Ask the user to type a name. Check whether that name is in the list. If exist, delete the name, otherwise append it at the end of the list.

(iv) Create a copy of the list in reverse order

(v) Print the original list and the reversed list.

18. Predict the output :

```
n=3
S="Make Hey While Sun shines"
w_len = [ ]
txt = S.split(" ")
for i in txt:
        if len(i)> n:
          w_len.append(i)
print(w_len)
```

19. Predict the output :

```
string="DO it @ 123"
Data=list(string)
for i in range(len(Data)):
    if(Data[i].isupper()):
            Data[i]=Data[i].lower()
    elif(Data[i].isspace()):
            Data[i]=Data[i+1]
print(Data)
```

20. Predict the output :

```
x="Welcome to Python"
print(x[:2],x[:-2],x[-2:])
print(x[5],x[3:6])
print(x[1:-4],x[-6:-2])
```

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