Solve the following Questions on LISTS.

**1.**Given two lists, l1 and l2, write a program to create a third list l3 by picking an odd-index element from the list l1 and even index elements from the list l2.

l1=[3,6,9,12,15,18,21]

l2=[4,8,12,16,20,24,28]

l3=[3,9,15,21,4,8,12,16,24,28]

l1=l2.extend(l3)

print(l3)

output=[3,9,15,21,4,8,12,16,24,28]

**2.**Write a program to remove the item present at index 4 and add it to the 2nd position and at the end of the list.

list1=[54,44,27,79,91,41]

list1.remove(91)

print(list1)

list1.insert(2,91)

print(list1)

list1.append(91)

print(list1)

**Output=**[54, 44, 27, 79, 41]

[54, 44, 91, 27, 79, 41]

[54, 44, 91, 27, 79, 41, 91]

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

sum=0

deepu=[10,20,30,40,50]

for i in (deepu):

  sum=sum+i

print(sum)

**Output=**150

**4.**Write a Python program to multiply all the items in a list.

sum=1

deepu=[10,20,30,40,50]

for i in (deepu):

  sum=sum\*i

print(sum)

Output=1200000

**5.**Write a Python program that accepts the user's first and last name and prints them in reverse order with a space between them.

deepu=input('enter a first\_name')

deepu\_1=input('enter a last\_name')

print(deepu,deepu\_1)

print(deepu\_1,deepu)

Output=enter a first\_namegnanadeepu

enter a last\_namejajala

gnanadeepu jajala

jajala gnanadeepu

**6.**Write a Python program to clone or copy a list.

abc=[10,20,30,40,50]

xyz=[80,90,70,60,45]

xyz=abc.copy()

print(xyz)

Output=[10, 20, 30, 40, 50]

**7.**Write a Python program to get the Fibonacci series between 0 and 50.

n=int(input('enter the number'))

a=0

b=1

i=0

while i<n:

  c=a+b

  if(c<=n):

print(c)

  a=b

  b=c

  i=i+1

Output= enter the number50

1

2

3

5

8

13

21

34

**8.**Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.

a=[0,1,2,3,4,5,6]

for i in a:

  if i==3 or i==6:

    continue

  print(i)

Output= 0 1 2 4 5