

LAB :- 5 (LIST)

1.Sum of list

Given an array compute the sum of all elements.

Input :-

A = [1 2 3 4 5]

Output:

15

2.Copy the Array

You are given a constant array A and an integer B.

You are required to return another array where $\text{Arr}[i] = \text{A}[i] + \text{B}$.

Input :-

A = [1 2 3 2 1]

B = 3

Output:

[4 5 6 5 4]

3.Max and Min of an Array

Take input an array A of size N and write a program to print maximum and minimum elements of the input array .Here N represents the length of the array .

Input :-

A = [1 2 3 4 5]

Output:

5 1

4.Search Element

You are given array A and an integer B. You have to tell whether B is present in array A or not.

Input:-

A = [1 5 9 1]

B = 5

Output:

1

5.Negative Integers

Write a program to print all negative numbers from input array A of size N.

Input:-

A = [1 -5 2 -8 -4]

Output:

-5

-8

-4

6.Even Odd Elements

For array A, you have to find the value of absolute difference between the counts of even and odd elements in the array.

Input:

A = [1 2 3 4]

Output:

0

7.Separate Odd Even

You are given an integer array A.

You have to print the odd and even elements of array A in 2 separate lines.

Input:

A = [1 2 3 4 5]

Output:

1 3 5

2 4

8.Square of Array

You are provided with an integer array A. Return another array B of size same as that of A such that $B[i] = A[i]^2$

Input:

A=[2, 6, 8, 1]

Output:

[4, 36, 64, 1]

9.Cube of Array

You are provided with an integer array A. Return another array B of size same as that of A such that $B[i] = A[i]^3$

Input:

A=[2, 6, 8, 1]

Output:

[8, 216, 512, 1]

10.Reverse

Given an array A, Find the reverse of it. (Solve this question with for loop)

Input:

A = [3, 5, 1, 2, 1, 2]

Output:

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

11. Add two list element:

Given two lists A1 and A2, each containing integers, write a Python program to compute the element-wise sum of the corresponding elements in the two lists and store the result in a new list.

Input:

A1=[1, 2, 3,4]

A2=[4, 5, 6,7]

Output:

[5, 7, 9, 11]

12. Find the output :

```
list = [2,4,6,8,10,12,14,16,18,20]
```

```
print(list[:])
```

```
print(list[::-1])
```

```
print(list[2:5])
```

```
print(list[2:])
```

```
print(list[2::])
```

```
print(list[:2])
```

```
print(list[::-2])
```

```
print(list[1::2])
```

```
print(list[2:10:2])
```

13. Find the output :

```
list = [1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21]
print(len(list))
print(list[-2:-5:-1])
print(list[-2:])
print(list[-2::])
print(list[:-2])
print(list[::2])
print(list[:::-1])
```

14. Find the output :

```
mylist = [1.4, 2, 3, 4, 5, 'Suyash']
mylist.reverse()
print(mylist)
```

15. Find the output :

- s = "Hello everyone how are you"

```
print(s.split())
```

- s = "Hello-everyone-how are you"

```
print(s.split("-"))
```

- word = 'Suyash:Chaudhary:Noida'

```
print(word.split(':'))
```

- t = "23456"

```
print(t.split())
```

- t = "2 3 4 5"

```
print(t.split())
```

16. Find the output :

I1 = [1, 2, 3, 5, 8, 9]

I2 = [3, 4, 5 , 6, 7, 10]

result = I1 + I2

print(result)

result1 = I1 * 3

print(result1)