**Assignment: 2**

**Harshit Choudhary**

1 - Write a program to take out the element from their index values:

x=[1,2,3,4,[10,20,30,40,[100,200,300,400],"rishabh\_",5+5j],4000]

[10,20]

(5+5j)

[300,400]

[40,[100,200,300,400],"rishabh\_"]

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer screen

Description automatically generated

2- Write a program to take out the pair of numbers whose sum is equal to an even number. You should return the list from the range of 1 to 21.

Example: x=[1,2,3,4,5]

Pair should be (2,4) this will return the sum as 6 which is even.

A screenshot of a computer

Description automatically generated

3-Write a program to calculate the frequency of any special character if that exist in any string.

Example: x="hello&\*$$world"

Answer should be {'&':1,'\*':1,'$':2}

4-Write a program to print the list of numbers which has a cube of odd numbers in the range of 1,50.

A screenshot of a computer screen

Description automatically generated

5- Write a program to print the copy of list which has al l the element multiplied by 3 but it should not reflect the result to the original list.

A screenshot of a computer

Description automatically generated

6- Write a program to calculate the length of each word in the sentence.

Example: x="Hel lo world I am learning python"

Now length of hello is 5.

A screenshot of a computer screen

Description automatically generated

7-Write a program to return True if the list consists only integer values only and if not return False.

A screenshot of a computer

Description automatically generatedA screenshot of a computer

Description automatically generated