Note: WAP = Write a program

1. WAP that takes n integer numbers, and sum up all the integers in that array.

Sample input	**Sample output**
5 1 2 3 4 5	15
6 5 6 7 8 0 1	27

2. WAP that takes n integer numbers, and multiply all the numbers in the odd indexed position. Indexing starts from 0.

Sample input	**Sample output**
5 1 2 3 4 5	8
6 5 6 7 8 0 1	48

3. WAP that takes a string as input, and shifts all the characters in the even indexed position by the following rule.
   ‘a’ becomes ‘b’
   ‘b’ becomes ‘c’
   …
   ‘z’ becomes ‘a’

Sample input	**Sample output**
abcdefg	bbddffh
zfth	afuh

4. WAP that takes 2 integer arrays as input, then computes the intersection of the two arrays.

Sample input	**Sample output**

4
1 2 3 5
5
1 6 2 7 3
	1 2 3

5
1 2 3 4 5
3
6 7 8	

5. WAP that takes 2 integer arrays as input, then computes the union of the two arrays.

Sample input	**Sample output**

4
1 2 3 5
5
1 6 2 7 3
	1 2 3 5 6 7

5
1 2 3 4 5
3
6 7 8
	1 2 3 4 5 6 7 8

6. Write a class named ‘**Cuboid’**.

- Create 3 private variables in the class. **length, width and height**.
- Create 2 constructor. One is an empty constructor that takes nothing as input and initializes length, width and height as 0. Another constructor takes 3 values as input and initializes length, width and height as the given values.
- Write a public function named ‘**getVolume**’ that calculates the volume of the Cuboid and returns the desired Volume.
- Write a public function named ‘**getSurfaceArea**’ that calculates the surface area of the Cuboid and returns the desired value.
- Create an array of ‘Cuboid’ objects(like 4 or 5 objects) and initialize length, width and height with any value you like. But make sure to give different length, width, height to different objects.
- Sort the ‘Cuboid’ objects in the increasing order of Volume by writing a custom comparator.
- Sort the ‘Cuboid’ objects in the increasing order of surface area by writing a custom comparator.

Note: Volume = l*w*h
Surface Area = 2*l*w+2*l*h+2*h*w
l = length, w = width , h = height