

**You only have to do one of the below tasks whichever you like although both questions carry different marks as indicated.**

Coding Task

Task-1 (3 marks)

Take an array from the user and perform the following operations,

- 1) Find max , min, average (up to 2 decimal places) of the numbers present in even indices
- 2) Find no of primes, no of twin primes present in odd indices

INPUT

- 1) N length of array
- 2) Integer Array

SAMPLE INPUT

5

1

3

4

5

3

SAMPLE OUTPUT

MAX = 4

MIN = 1

AVG = 2.66

NO OF PRIMES = 2

NO OF TWIN PRIMES = 1

TASK-2(PROGRAMMING)-max. marks (6 marks)

Given an array of integers, every element appears twice except for one. Find that single one.

Coding is not just writing Brute-force but to apply your innovative minds to optimize the code. So here we go.

If code is working by any means- 3 marks. (base)

If you use input array as read only and do not manipulate-(+1) mark.

Could you implement it without using extra memory? -(+1) mark.

Your algorithm has a linear runtime complexity? – (+1) mark.

(For runtime complexity- refer Internet)

Hint- The game of 0 1 may come in picture.

**Example:**

Input: [1 2 2 3 1]

Output: 3

NOTE: -

- 1) Any coding language is permitted!
- 2) Submit your file via BITS Mail before the deadline.
- 3) Just be original and innovative!

**Team Programming (IEEE BPSC)**