

## Assignment 3

### Topic:-Array

**Prerequisite :- Array and Math**

**Tutorial :-**

<https://www.geeksforgeeks.org/array-data-structure/>

<https://guide.freecodecamp.org/>

<https://www.hackerearth.com/practice/data-structures/arrays/1-d/tutorial/>

**Q 1** Given an array of N integers, return the element which frequency are maximum. In cases, where frequencies are equal, you can print any element.

**Input format:-**

- n denoting size of an array.
- Array of integers of size n.

**Output format:-**

Single integer which frequency is maximum.

**Constraint:-**

$$1 < N < 10^6$$

$$1 < A[i] < 10^9$$

**Example:**

Input:

[2,1,3,1,2,2,3,2,6,2,9]

Output:

2

Input:-

[1,1,1,1,4,4,4,4,3,3]

Output:-

1

**Q.2 Given an array of size N. Divide the array into two halves and calculate the sum of both the halves and print the sum having minimum value.**

**Input:**

- n denoting size of an array(assume it to be even value).
- Array of integers of size n.

**Output:**

- The value of minimum sum

**Constraint:-**

$$1 < N < 10^6$$

$$1 < A[i] < 10^9$$

**Sample Test Case 1:**

Input:

6

2 7 1 3 4 5

Output:

10

**Sample Test Case 2:**

Input:

4

9 8 7 10

Output:

17

**Note :- N always be even.**

