

## 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 5** Given an unsorted array of integers, find the sum of longest Continuous increasing Subsequence.

**Input format:-**

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

**Output format:-**

Single integer which is the sum of longest continuous increasing subarray.

**Constraint:-**

$$1 < N < 10^6$$

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

**Example:**

Input:

n=5

[1,4,6,5 7]

Output:

11

Input:-

n=14

[1,1,1,1,1,1,2,5,4,4,5,6,7,8]

Output:-

30

Explain:-

Longest continuous increasing subsequence 4,5,6,7,8

Input:-

n=6

[4,5,6,1,2,3]

Output:-

15

**Q.6 Given an array of size N. Find two elements from the array whose product is maximum.**

**Input:**

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

**Output:**

- Max product of two elements.

**Constraint:-**

$1 < N < 10^6$

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

**Sample Test Case 1:**

Input:

6

2 7 1 3 4 5

Output:

35

**Sample Test Case 2:**

Input:

4

9 8 7 10

Output:

90

**Note :- Sorting is not allowed.**