

**United International University**  
**Coding Test 2 Section A**

1. Given an array of integers. Write a program to calculate the product of a particular number and its previous number using linear search.

Sample Input: [1, 4, 5, 7, 8, -2, 6, 0, 19, -15]

Number: 5

Output :  $5 * 4 = 20$

2. Given a sorted array of non-negative distinct integers, find the smallest missing non-negative element in it using binary search.

Input: [0, 1, 2, 3, 4, 6, 9, 11, 15]

Output: The smallest missing element is 5