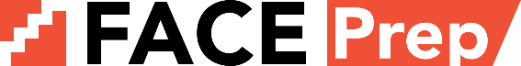
**Q1.** Write a program to encipher the given character by using the given key.

In this coding scheme alphabet code of a/A-0, b/B-1, ..., z/Z - 25

**Input format:**

The first line input will be a character.

The next line will be a key value (integer type).

**Output format:**

Encipher the given character and print the same without framing any extra words

**Sample Input:**

B

10

**Sample Output**

L

**Explanation:**

Add the key value 10 to the B's value i.e., 1+10 = 11 and 11's respective character is L.

**Q2.** Given two positive integers N and K and an array arr of length N consisting the details of the cost of Laptops. An integer K is an amount with you. Find the maximum number of different Laptops that can be bought using the amount K.

**Constraints:**

1 ≤ T ≤ 10

1 ≤ N ≤ 1000

1 ≤ K, arr[i] ≤ 10000

**Input format:**

Line 1 should be the number of test cases

Values of N and K are to be input in lines 2 and 3 respectively

Line 3 has the values of the array

**Output format:**

Maximum number of laptops that can be bought using the amount K

**Sample Input:**

1

7

50

1 12 5 111 200 1000 10

**Sample Output:**

4

**Explanation:**

The costs of the Laptops are 1, 12, 5, 10

**Q3.** Sita has a love for Dairy milk. She has bought a huge Dairy milk chocolate bar which contains N squares arranged in a row. Each of the squares has a tastiness level which is denoted by an array A[]. Sita can eat the first or the last square of the chocolate bar at once. Sita has a sister who too loves chocolates and she demands the final chocolate square that is left over. Now, Sita, being greedy, eats all the tastier squares possible. Determine the tastiness level of the square which her sister gets.

**Input format:**

First line of input contains a single integer T denoting the number of test cases.

The first line of each test case contains an integer N.

The second line contains N space-separated integers denoting the array A.

**Output format:**

For each test case, print the required answer in a new line.

**Constraints :**

1 <= T <= 100

1 <= N <= 250

1 <= A[i] <= 1000

**Example :**

**Input :**

3

5

5 3 1 6 9

6

2 6 4 8 1 6

4

2 2 2 2

**Output :**

1

1

2

**Explanation :**

**Case 1 :**

Initially : 5 3 1 6 9

5 3 1 6

5 3 1

3 1

1

**Case 2 :**

Initially : 2 6 4 8 1 6

2 6 4 8 1

6 4 8 1

4 8 1

8 1

1

**Case 3 :**

Initially : 2 2 2 2

2 2 2

2 2

2

**Q4.** Given an integer array A[] of size N, find the length of the longest sub-array from the given array, which is first strictly increasing and then after a point is strictly decreasing.

The Sub-array should follow the conditions:

Size of the sub-array should be greater than or equal to 3.

There exists some index i (0-indexed) with 0 < i < A.SIZE- 1 such that:

A[0] < A[1] < ............< A[i - 1] < A[i] &&

A[i] > A[i + 1] >............ > A[A.SIZE - 1]

Return 0 if there is no such sub-array.

**Example 1:**

Input: A = [2,1,5,8,3,2,5]

Output: 5

**Explanation:** The Longest Sub-array, which is first strictly increasing and then after a point is strictly decreasing, is [1,5,8,3,2] whose length is 5.

**Example 2:**

Input: A = [7,7,7]

Output: 0

**Explanation:** There is no such Sub-array.

**Input Format:**

The First argument is an integer size of the array A.

The Second argument is an integer array A.

**Output Format:**

Return an integer representing the length of the Longest Sub-array, which is first strictly increasing and then after a point is strictly decreasing.