

Lab Task 1

1. Write a program that reads n numbers from the user and stores them in an array. The program reads a number between 0-100 and shows the number at the corresponding index number.

For example, $N=4$, array $[4] = \{50, 65, 34, 67\}$, if the user enters 65, your program should print array $[2]$.

2. Write a program that reads n numbers from the user and stores them in an array. Now perform the following operation using the switch statement.
 - i. Prints the even numbers in reverse order.
 - ii. Read a number from the user, and print "YES" if the number exists in the array. Otherwise print "NO"
3. Write a program that reads n numbers from the user, but does not allow the user to enter duplicates. This means that if a number has been entered already, the program will not accept it as input again and instead ask the user to enter a different number.
4. Given two integer arrays of same size, "arr[]" and "index[]", reorder elements in "arr[]" according to given index array. It is not allowed to given array arr's length.

Input: $arr[] = [10, 11, 12];$
 $index[] = [1, 0, 2];$
Output: $arr[] = [11, 10, 12]$
 $index[] = [0, 1, 2]$
Input: $arr[] = [50, 40, 70, 60, 90]$
 $index[] = [3, 0, 4, 1, 2]$
Output: $arr[] = [40, 60, 90, 50, 70]$
 $index[] = [0, 1, 2, 3, 4]$

$arr[index[0]] = 11$
 $arr[0] = 10$
 $arr[2] = 12$
 $i++$
 $arr[index[0]] = 11$
 $arr[index[1]] = 10$
 $arr[index[2]] = 12$