**Day 2 assignment – Data Structures and Algorithms**

1. // reduce size of array and move all

   // elements on space ahead

      n = n - 1;

      for (int j=i; j<n; j++)

         arr[j] = arr[j+1];

**2.**   // C program to rotate an array by d elements

#include <stdio.h>

/\* Function to left Rotate arr[] of size n by 1\*/

void leftRotatebyOne(int arr[], int n);

/\*Function to left rotate arr[] of size n by d\*/

void leftRotate(int arr[], int d, int n)

{

    int i;

    for (i = 0; i < d; i++)

        leftRotatebyOne(arr, n);

}

void leftRotatebyOne(int arr[], int n)

{

    int temp = arr[0], i;

    for (i = 0; i < n - 1; i++)

        arr[i] = arr[i + 1];

    arr[i] = temp;

}

/\* utility function to print an array \*/

void printArray(int arr[], int n)

{

    int i;

    for (i = 0; i < n; i++)

        printf("%d ", arr[i]);

}

/\* Driver program to test above functions \*/

int main()

{

    int arr[] = { 1, 2, 3, 4, 5, 6, 7 };

    leftRotate(arr, 2, 7);

    printArray(arr, 7);

    return 0;

}