Day 2

1. Write the program for deleting an element from the beginning and from any position.

Sol.

void main()

{

int a[100],i,n,pos;

printf("\nEnter no of elements\n");

scanf("%d",&n);

printf("Enter the elements\n");

for (i=0;i<n;i++)

{

scanf("%d",&a[i]);

}

printf("Elements of array are\n");

for(i=0;i<n;i++)

{

printf("a[%d] = %d\n",i,a[i]);

}

printf("Enter the position from which the number has to be deleted\n");

scanf("%d",&pos);

for(i=pos;i<n-1;i++)

{

a[i]=a[i+1];

}

n=n-1;

printf("\nOn Deletion, new array we get is\n");

for(i=0;i<n;i++)

{

printf("a[%d] = %d\n",i,a[i]);

}

}

1. Write the program for printing the array after rotating it k times towards left, where k would be taken as user input.

// C program to rotate an array by k 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 k, int n)

{

int i;

for (i = 0; i < k; 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]);

}

int main()

{

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

leftRotate(arr, 2, 7);

printArray(arr, 7);

return 0;

}