**ASSIGNMENT -2**

**Question 1**

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

a.) DELETING ELEMENT FROM BEGINNING

#include<stdio.h>

int main()

{

int a[1000],i,n,k;

printf("enter the number of array elements");

scanf("%d",&n);

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

{

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

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

}

k=a[0];

while(k<n)

{

a[k]=a[k+1];

k++;

}

a[n]=0;

n=n-1;

printf("\n The array after deletion is : ");

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

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

}

b.)DELETING ELEMENT AT ANY POSITION

#include <stdio.h>

#include <conio.h>

int main()

{

int i, n, pos, arr[10];

printf("\n Enter the number of elements in the array : ");

scanf("%d", &n);

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

{

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

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

}

printf("\nEnter the position from which the number has to be deleted : ");

scanf("%d", &pos);

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

arr[i] = arr[i+1];

n--;

printf("\n The array after deletion is : ");

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

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

}

**Question 2**

Write the program for printing the array after rotating it k times towards left, where k

would be taken as user input.

#include <stdio.h>

#define SIZE 10 /\* Size of the array \*/

void printArray(int arr[]);

void rotateByOne(int arr[]);

int main()

{

int i, N;

int arr[SIZE];

printf("Enter 10 elements array: ");

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

{

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

}

printf("Enter number of times to left rotate: ");

scanf("%d", &N);

//Actual rotation

N = N % SIZE;

// Print array before rotation

printf("Array before rotationn");

printArray(arr);

// Rotate array n times

for(i=1; i<=N; i++)

{

rotateByOne(arr);

}

// Print array after rotation

printf("\n\nArray after rotation\n");

printArray(arr);

return 0;

}

void rotateByOne(int arr[])

{

int i, first;

//Store first element of array

first = arr[0];

for(i=0; i<SIZE-1; i++)

{

// to move every array element to left

arr[i] = arr[i + 1];

}

//To Copy the first element of array to last

arr[SIZE-1] = first;

}

// To Print the given array

void printArray(int arr[])

{

int i;

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

{

printf("%d ", arr[i]);

}

}