**Day 2 Assignment**

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

Ans) The program for deleting an element from an array :-

#include<stdio.h>

#define MAX\_SIZE 100

int main()

{

int arr[MAX\_SIZE];

int i , size , pos;

printf("Enter the size of the array : ");

scanf("%d",&size);

printf("Enter the elements in the array : ");

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

{

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

}

printf("Enter the element position to delete : ");

scanf("%d",&pos);

if(pos<0 || pos>size)

{

printf("Invalid position ! Please enter position between 1 to %d",size);

}

else

{

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

{

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

}

size--;

printf("\nElements of array after delete are : ");

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

{

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

}

}

return 0;

}

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

Ans)

#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 rotation");

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++)

{

/\* Move each array element to its left \*/

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

}

/\* Copies the first element of array to last \*/

arr[SIZE-1] = first;

}

/\*\*

\* Print the given array

\*/

void printArray(int arr[])

{

int i;

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

{

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

}

}