**Day – 50 of the #101 days of the coding challenge---------------**

**Problem🡪 Left and Right shifting elements according to the given position by the user.**

**Code:-**

#include <iostream>

using namespace std;

void rightShiftArray(int \*arr, int position, int n)

{

if (position < 0) {

cout << "Invalid position. Position should be non-negative." << endl;

return;

}

// Right shifting

position %= n; // Ensure position is within array size

int temp[n];

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

temp[(i + position) % n] = arr[i];

}

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

arr[i] = temp[i];

}

}

void leftShiftArray(int \*arr, int position, int n)

{

if (position < 0) {

cout << "Invalid position. Position should be non-negative." << endl;

return;

}

//Left shifting

position %= n; // Ensure position is within array size

int temp[n];

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

temp[i] = arr[(i + position) % n];

}

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

arr[i] = temp[i];

}

}

int main()

{

int n;

cout << "Enter the size of the array: ";

cin >> n;

int arr[n];

cout << "Enter the elements of the array for right shift:" << endl;

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

cin >> arr[i];

}

int arr1[n];

cout << "Enter the elements of the array for left shift:" << endl;

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

cin >> arr1[i];

}

int position;

cout << "Enter the number of positions to shift: ";

cin >> position;

cout << "Right Shift---->"<<endl;;

rightShiftArray(arr, position, n);

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

cout << arr[i] << " ";

}

cout << endl;

cout << "Array after shifting:" << endl;

cout << "Left Shift---->"<<endl;;

leftShiftArray(arr1, position, n);

cout << "Array after left shifting:" << endl;

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

cout << arr1[i] << " ";

}

cout << endl;

return 0;

}

Output:-

