Assignment

1) Write a C program to perform deletion of an element from an array in the given position.

Programme:

```
#include <stdio.h>
int main() {
   int n, pos, i;
   printf("Enter the size of the array: ");
   scanf("%d", &n);
   int arr[n];
   printf("Enter the elements of the array: ");
   for(i = 0; i < n; i++) {
      scanf("%d", &arr[i]);
   }
   printf("Enter the position to delete: ");
   scanf("%d", &pos);
   if(pos < 1 || pos > n) {
      printf("Invalid position!\n");
   }
else {
      for(i = pos - 1; i < n - 1; i++) {
         arr[i] = arr[i + 1];
      }
      n--;
printf("Array after deletion: ");
      for(i = 0; i < n; i++) {
         printf("%d ", arr[i]);
      }
      printf("\n");
   }
   return 0;
```

```
}
```

Sample Input:

```
5                          // Array Size
11 22 33 44 55  /          / Array elements
3                          // Position of element to delete
```

Sample Output:

```
11 22 44 55
```

2) Write a C program to rotate the elements of an integer array by one step in an anti-clockwise direction (left rotation). The program should take an array as input and output the rotated array.

Programme:

```
#include <stdio.h>
int main() {
   int n, i;
   printf("Enter the size of the array: ");
   scanf("%d", &n);
   int arr[n];
   printf("Enter the elements of the array: ");
   for(i = 0; i < n; i++) {
      scanf("%d", &arr[i]);
   }
   int temp = arr[0];

   for(i = 0; i < n - 1; i++) {
      arr[i] = arr[i + 1];
   }
   arr[n - 1] = temp;
   printf("Array after rotation: ");
   for(i = 0; i < n; i++) {
      printf("%d ", arr[i]);
```

```
    }
    printf("\n");
    return 0;
}
```

For example:

Input:

```
5
11 22 33 44 55
```

Output:

```
22 33 44 55 11
```