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

ANSWER:-

```
#include <stdio.h>

#define MAX_SIZE 100

int main()
{
    int arr[MAX_SIZE];
    int i, size, pos;

    /* Input size and element in array */
    printf("Enter size of the array : ");
    scanf("%d", &size);
    printf("Enter elements in array : ");
    for(i=0; i<size; i++)
    {
        scanf("%d", &arr[i]);
    }

    /* Input element position to delete */
    printf("Enter the element position to delete : ");
    scanf("%d", &pos);

    /* Invalid delete position */
    if(pos < 0 || pos > size)
    {
        printf("Invalid position! Please enter position between 1 to %d", size);
    }
}
```

```

    }
else
{
    /* Copy next element value to current element */
    for(i=pos-1; i<size-1; i++)
    {
        arr[i] = arr[i + 1];
    }

    /* Decrement array size by 1 */
    size--;

    /* Print array after deletion */
    printf("\nElements of array after delete are : ");
    for(i=0; i<size; i++)
    {
        printf("%d\t", arr[i]);
    }
}

return 0;
}

```

OUTPUT:-

```

Enter size of the array : 5
Enter elements in array : 10 20 30 40 50
Enter the element position to delete : 2

Elements of array after delete are :
10      30      40      50

```

Question 2 Write the program for printing the array after rotating it k times towards left, where k would be taken as user input.

ANSWER:-

```
#include <stdio.h>

void leftRotatebyOne(int arr[], int n);

void leftRotate(int arr[], int d, int n)
{
    int i;
    for (i = 0; i < d; 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;
}

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;
}
```

OUTPUT :-

```
3 4 5 6 7 1 2
```