

Task 1:

```
#include<stdio.h>
void sL(int input[],int k,int n)
{
    int j;
    for(j=0; j<n; j++)
    {
        if(j<n-k)
        {
            input[j]=input[j+k];

        }
        else
        {
            input[j]=0;
        }

    }
    printf("\nMy array= ");
    for(j=0;j<n;j++)
    {
        printf("%d,",input[j]);
    }

}

int main()
{
    int n,k,i;
    printf("Enter Array Size= ");
    scanf("%d",&n);
    int input[n];
    printf("\nEnter Array Elements= ");
    for(i=0; i<n; i++)
    {
        scanf("%d",&input[i]);
    }
    printf("\nEnter 'k' positions= ");
    scanf("%d",&k);
    sL(input,k,n);
}
```

```
    return 0;
}
```

#### TASK 2:

```
#include<stdio.h>
void shiftRight(int source[],int k,int size)
{
    int j;
    for(j=size-1; j>=0; j--)
    {
        if(j>=k)
            source[j]=source[j-k];
    else
    {
        source[j]=0;
    }

    }
    printf("\nFinal output= ");
    for(j=0;j<size;j++)
    {
        printf("%d,",source[j]);
    }

}

int main()
{
    int size,k,i;
    printf("Enter Array Size= ");
    scanf("%d",&size);
    int source[size];
    printf("\nEnter Array Elements= ");
    for(i=0; i<size; i++)
    {
        scanf("%d",&source[i]);
    }
}
```

```

printf("\nEnter 'k' positions= ");
scanf("%d",&k);
shiftRight(source,k,size);

return 0;
}

```

### TASK 3:

```

#include<stdio.h>
void rotateLeft(int source[],int k,int size)
{
    int j,m;
    for(j=0;j<k;j++)//2
    {
        int first=0,second=first+1;
        int temp=source[0];
        for(m=0;m<size;m++)// 3 4 5 6 1 2
        {
            source[first]=source[second];
            first=(first+1)%size;
            second=(first+1)%size;
        }
        source[size-1]=temp;
    }
    for(m=0;m<size;m++)
    {
        printf("%d,",source[m]);
    }
}

int main()
{
    int size,k,i;
    printf("Enter Array Size= ");
    scanf("%d",&size);
    int source[size];
    printf("\nEnter Array Elements= ");
    for(i=0; i<size; i++)
    {
        scanf("%d",&source[i]);
    }
    printf("\nEnter 'k' positions= ");
    scanf("%d",&k);
}

```

```

        rotateLeft(source,k,size);

    return 0;
}

```

#### TASK 4:

```

#include<stdio.h>
void rotateRight(int source[],int k,int size)
{
    int j,m;
    for(j=0;j<k;j++)
    {
        int first=size-1,second=first-1;
        int temp=source[size-1];

        for(m=0;m<size;m++)
        {
            source[first]=source[second];
            first=(first-1)%size;
            second=(first-1)%size;
        }
        source[0]=temp;
    }
    for(m=0;m<size;m++)
    {
        printf("%d,",source[m]);
    }
}

int main()
{
    int size,k,i;
    printf("Enter Array Size= ");
    scanf("%d",&size);
    int source[size];
    printf("\nEnter Array Elements= ");
    for(i=0; i<size; i++)
    {
        scanf("%d",&source[i]);
    }
    printf("\nEnter 'k' positions= ");
    scanf("%d",&k);
    rotateRight(source,k,size);
}

```

```
    return 0;
}
```

#### TASK 5:

```
#include<stdio.h>
void Remove(int source[],int size,int element)
{
    int m,n;
    for(m=0;m<size;m++)
    {
        if(m==element)
        {
            for(n=m;n<size-1;n++)
            {
                source[n]=source[n+1];
            }
            source[size-1]=0;
        }
    }
    for(m=0;m<size;m++)
    {
        printf("%d,",source[m]);
    }
}
int main()
{
    int size,element,i;
    printf("Enter Array Size= ");
    scanf("%d",&size);
    int source[size];
    printf("\nEnter Array Elements= ");
    for(i=0; i<size; i++)
    {
        scanf("%d",&source[i]);
    }
    printf("\nEnter IDX for Remove= ");
    scanf("%d",&element);
    Remove(source,size,element);
}
```

**TASK 6:**

```
#include<stdio.h>
void RemoveAll(int input[],int size,int element)
{
    int m,n;
    for(m=0;m<size;m++)
    {
        if(input[m]==element)//2
        {
            for(n=m;n<size-1;n++)//1 3 4 0 0
            {
                input[n]=input[n+1];
            }
            input[size-1]=0;
            m--;
        }
    }
    for(m=0;m<size;m++)
    {
        printf("%d,",input[m]);
    }
}
int main()
{
    int size,element,i;
    printf("Enter Array Size= ");
    scanf("%d",&size);
    int source[size];
    printf("\nEnter Array Elements= ");
    for(i=0; i<size; i++)
    {
        scanf("%d",&input[i]);
    }
    printf("\nEnter occurrences for Remove= ");
    scanf("%d",&element);
    RemoveAll(input,size,element);
}
```

**TASK 7:**

```
#include<stdio.h>
```

```

void Repet(int arr[],int size)
{
    int m,n,k,l,count=0,j=1,count2=0;
    int arr2[size];
    int copy[size];
    for(m=0;m<size;m++)
    {
        copy[m]=arr[m];
    }
    for(m=0;m<size;m++)
    {
        k=1;
        for(n=m+1;n<size;n++)
        {
            if(arr[m]==copy[n])
            {
                k++;
                copy[n]=-1;
            }
        }
        arr2[count]=k;
        count++;
    }
    for(m=0;m<count;m++)
    {
        for(n=m+1;n<count;n++)
        {
            if(arr2[m]==arr2[n] && arr2[m]>1)
            {
                count2=1;
            }
        }
    }
    if(count2==1)
    {
        printf("\nTrue");
    }
    else{
        printf("\nFalse");
    }
}

```

```
    }  
}  
int main()  
{  
    int size,k,i;  
    printf("Enter Array Size= ");  
    scanf("%d",&size);  
    int arr[size];  
    printf("\nEnter Array Elements= ");  
    for(i=0; i<size; i++)  
    {  
        scanf("%d",&arr[i]);  
    }  
    Repet(arr,size);  
}
```