Assignment:14

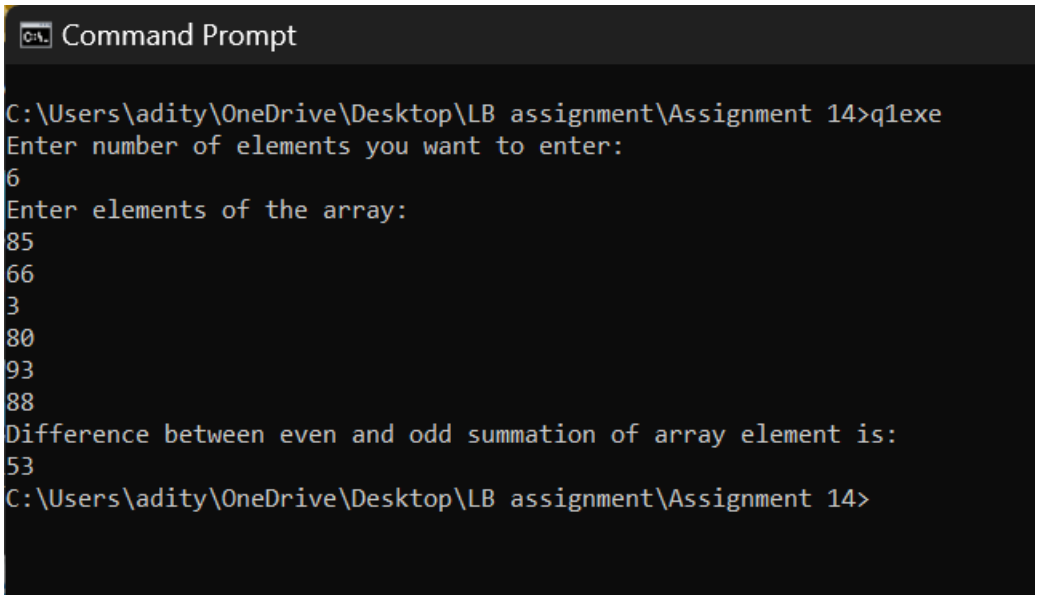
Q.1 Accept n numbers from user and return difference between summation of even and odd numbers.

Ans.

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

int SumDiff(int Arr[],int iSize)
{
    int iCnt=0,iSumE=0,iSumO=0;
    int iDiff=0;

    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if(Arr[iCnt]%2==0)
        {
            iSumE+=Arr[iCnt];
        }
        else
        {
            iSumO+=Arr[iCnt];
        }
    }
    iDiff=iSumE-iSumO;

    return iDiff;
}

int main()
{
    int iLength=0,iCnt=0;
    int *ptr=NULL;

    printf("Enter number of elements you want to enter:\n");
    scanf("%d",&iLength);

    ptr=(int *)malloc(sizeof(int)*iLength);

    printf("Enter elements of the array:\n");

    for(iCnt=0;iCnt<iLength;iCnt++)
    {
```

```
        scanf("%d",&ptr[iCnt]);
    }
    if(ptr==NULL)
    {
        printf("Unable to allocate memory..!");
    }

    int iRet=SumDiff(ptr,iLength);

    printf("Difference between even and odd summation of array element
is:\n%d",iRet);

    free(ptr);

    return 0;
}
```

OUTPUT:

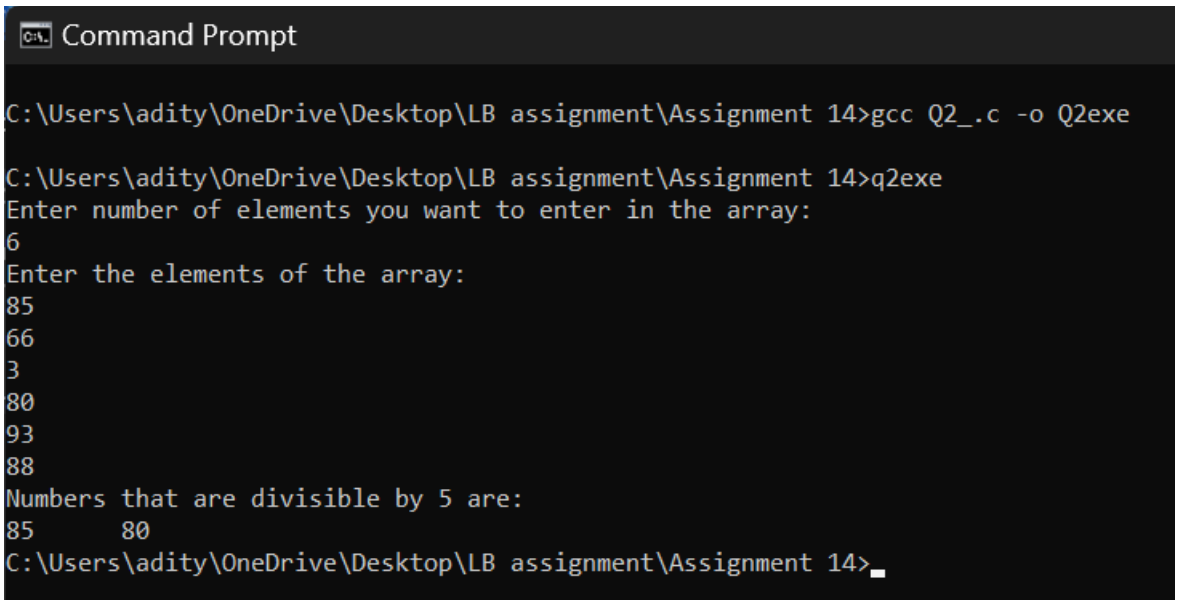


Q.2 Accept n numbers from the user and return such values which are divisible by 5.

Ans.

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

void nDivisibleBy5(int Arr[],int iSize)
{
    int iCnt=0;

    printf("Numbers that are divisible by 5 are:\n");
    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if(Arr[iCnt]%5==0)
        {
            printf("%d\t",Arr[iCnt]);
        }
    }
}

int main()
{
    int *ptr=NULL;
    int iLength=0,iCnt=0;

    printf("Enter number of elements you want to enter in the array:\n");
    scanf("%d",&iLength);

    ptr=(int *)malloc(sizeof(int)*iLength);
    if(ptr==NULL)
    {
        printf("Unable to allocate memory..!");
    }

    printf("Enter the elements of the array:\n");
    for(iCnt=0;iCnt<iLength;iCnt++)
    {
        scanf("%d",&ptr[iCnt]);
    }

    nDivisibleBy5(ptr,iLength);
    free(ptr);

    return 0;
}
```

OUTPUT:



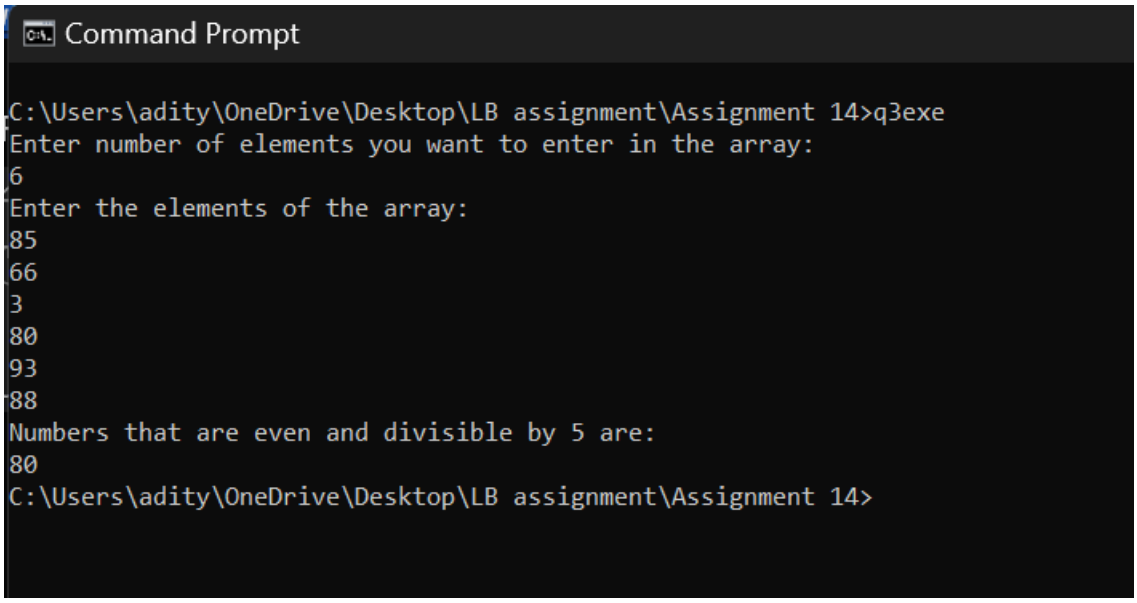
Q.3 Accept n numbers of elements from user and print numbers which are even and divisible by five.

Ans.

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

void nEvenDivisibleBy5(int Arr[],int iSize)
{
    int iCnt=0;

    printf("Numbers that are even and divisible by 5 are:\n");
    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if((Arr[iCnt]%2==0)&&(Arr[iCnt]%5==0))
        {
            printf("%d\t",Arr[iCnt]);
        }
```

```
    }
}

int main()
{
    int *ptr=NULL;
    int iLength=0,iCnt=0;

    printf("Enter number of elements you want to enter in the array:\n");
    scanf("%d",&iLength);

    ptr=(int *)malloc(sizeof(int)*iLength);
    if(ptr==NULL)
    {
        printf("Unable to allocate memory..!");
    }

    printf("Enter the elements of the array:\n");
    for(iCnt=0;iCnt<iLength;iCnt++)
    {
        scanf("%d",&ptr[iCnt]);
    }

    nEvenDivisibleBy5(ptr,iLength);
    free(ptr);

    return 0;
}
```

OUTPUT:

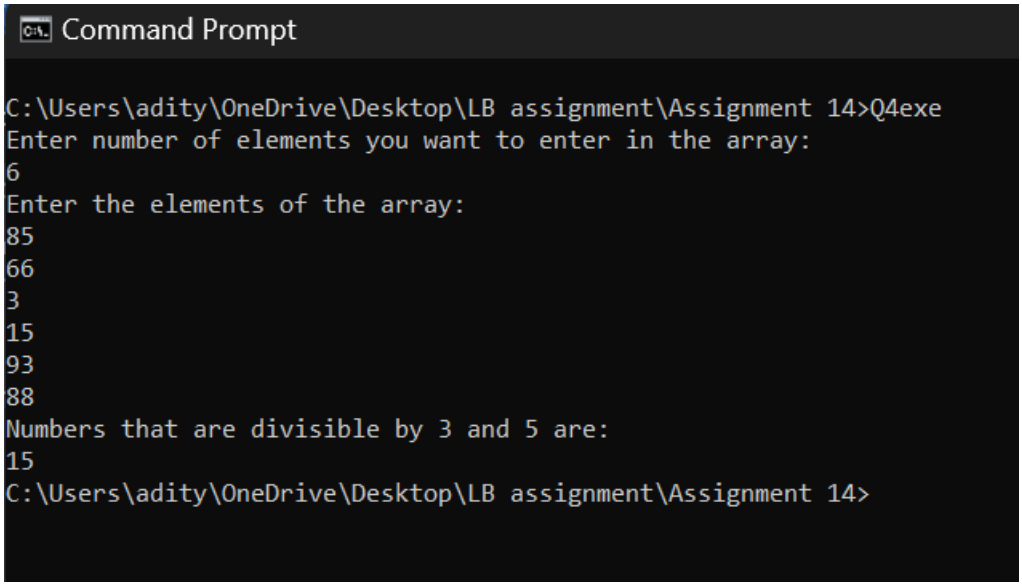


Q.4 Accept n numbers from user and print such numbers which are divisible by 3 and 5.

Ans.

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

void nDivisible3_5(int Arr[],int iSize)
{
    int iCnt=0;

    printf("Numbers that are divisible by 3 and 5 are:\n");
    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if((Arr[iCnt]%3==0)&&(Arr[iCnt]%5==0))
        {
            printf("%d\t",Arr[iCnt]);
        }
    }
}

int main()
{
    int *ptr=NULL;
    int iLength=0,iCnt=0;

    printf("Enter number of elements you want to enter in the array:\n");
    scanf("%d",&iLength);

    ptr=(int *)malloc(sizeof(int)*iLength);
    if(ptr==NULL)
    {
        printf("Unable to allocate memory..!");
    }

    printf("Enter the elements of the array:\n");
    for(iCnt=0;iCnt<iLength;iCnt++)
    {
        scanf("%d",&ptr[iCnt]);
    }

    nDivisible3_5(ptr,iLength);
    free(ptr);
    return 0;
}
```

OUTPUT:



Q.5 Accept n numbers from user and display multiples of 11.

Ans.

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

void nDivisible3_5(int Arr[],int iSize)
{
    int iCnt=0;

    printf("Multiples of 11 from array are:\n");
    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if(Arr[iCnt]%11==0)
        {
            printf("%d\t",Arr[iCnt]);
        }
    }
}

int main()
{
    int *ptr=NULL;
```

```c
    int iLength=0,iCnt=0;

    printf("Enter number of elements you want to enter in the array:\n");
    scanf("%d",&iLength);

    ptr=(int *)malloc(sizeof(int)*iLength);
    if(ptr==NULL)
    {
        printf("Unable to allocate memory..!");
    }

    printf("Enter the elements of the array:\n");
    for(iCnt=0;iCnt<iLength;iCnt++)
    {
        scanf("%d",&ptr[iCnt]);
    }

    nDivisible3_5(ptr,iLength);
    free(ptr);

    return 0;
}
```

OUTPUT: