

## Assignment:15

**Q.1 Accept n numbers and return frequency of numbers.**

**Ans.**

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

int EvenNumCnt(int Arr[],int iSize)
{
    int iCnt=0,iFreq=0;

    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if(Arr[iCnt]%2==0)
        {
            iFreq++;
        }
    }
    return iFreq;
}

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

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

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

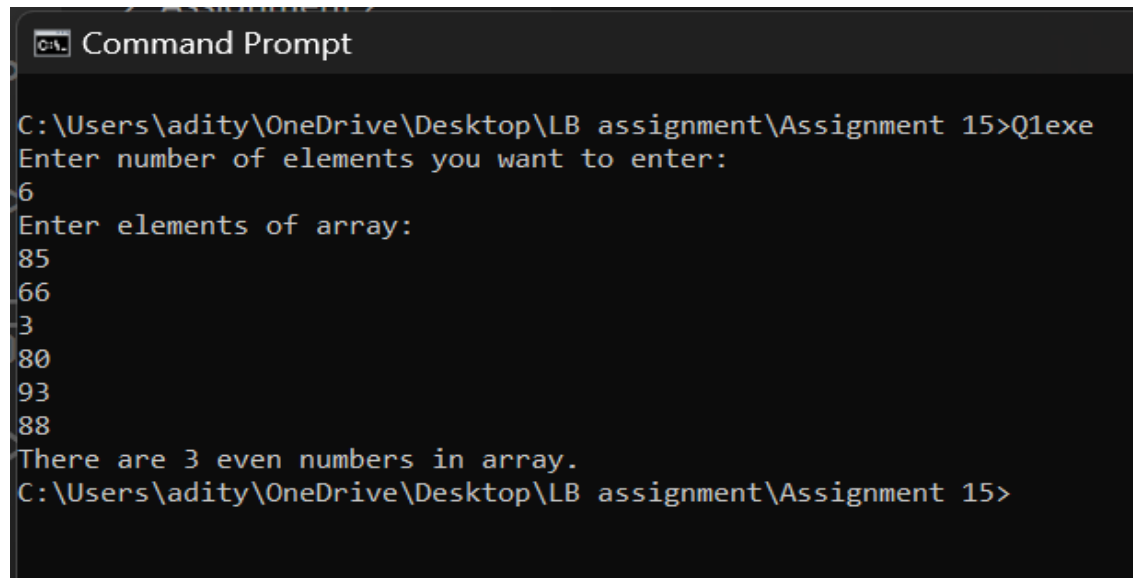
    printf("Enter elements of array:\n");
    for(iCnt=0;iCnt<iLength;iCnt++)
    {
        scanf("%d",&ptr[iCnt]);
    }

    int iRet=EvenNumCnt(ptr,iLength);

    printf("There are %d even numbers in array.", iRet);
```

```
    free(ptr);  
    return 0;  
}
```

## OUTPUT:



```
Command Prompt  
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>Q1.exe  
Enter number of elements you want to enter:  
6  
Enter elements of array:  
85  
66  
3  
80  
93  
88  
There are 3 even numbers in array.  
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>
```

**Q.2 Accept n numbers from user and return difference between frequency of even and odd numbers.**

**Ans.**

```
#include<stdio.h>  
#include<stdlib.h>  
  
int DiffEvOdCnt(int Arr[],int iSize)  
{  
    int iCnt=0,iFreqE=0,iFreqO=0;  
  
    for(iCnt=0;iCnt<iSize;iCnt++)  
    {  
        if(Arr[iCnt]%2==0)  
        {  
            iFreqE++;  
        }  
        else
```

```

        iFreq0++;
    }

    int iDiff=iFreqE-iFreq0;
    if(iDiff<0)
    {
        iDiff=-iDiff;
    }

    return iDiff;
}

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

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

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

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

    int iRet=DiffEvOdCnt(ptr,iLength);

    printf("Difference between even and odd numbers count is:\t%d.", iRet);

    free(ptr);
    return 0;
}

```

## OUTPUT:

```

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>q2exe
Enter number of elements you want to enter:
7
Enter elements of array:
85
66
3
80
93
88
90
Difference between even and odd numbers count is: 1.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>

```

**Q.3 Accept n numbers from user and check whether 11 is present or not.**

**Ans.**

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

int CheckValue(int Arr[],int iSize)
{
    int iCnt=0,iCheck=0;

    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if(Arr[iCnt]==11)
        {
            iCheck+=1;
            break;
        }
    }

    if(iCheck==1)
    {
        return true;
    }
    else
    return false;
}

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

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

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

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

```

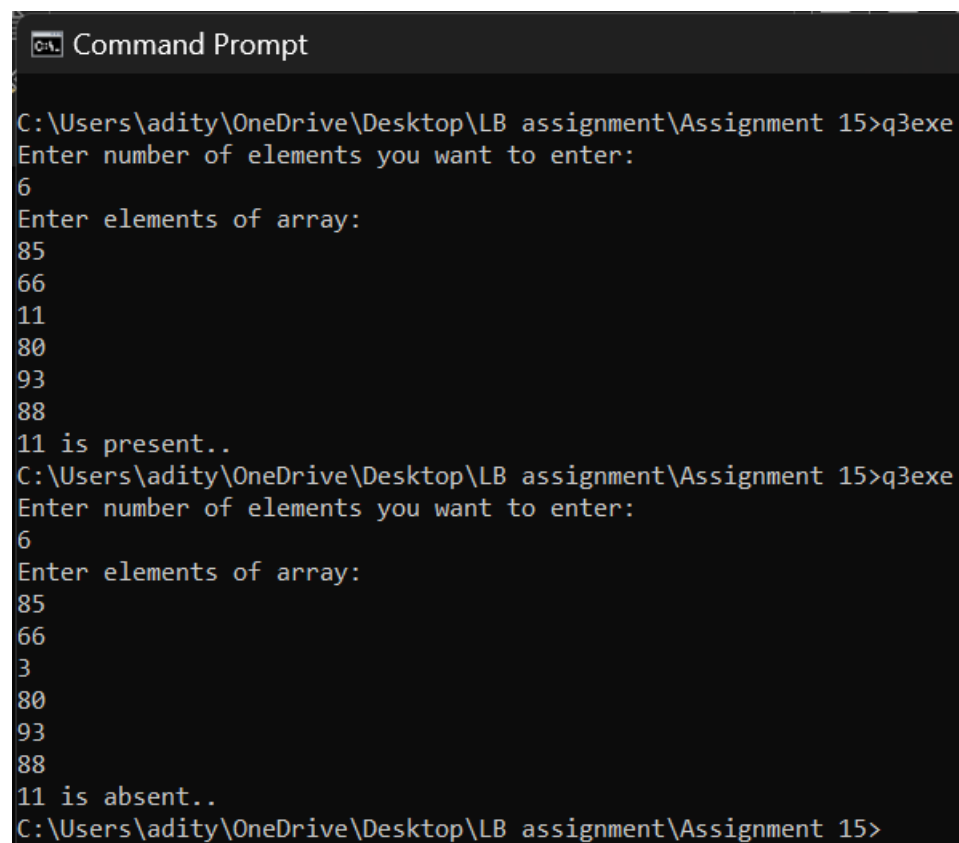
int iRet=CheckValue(ptr,iLength);

if(iRet==true)
{
    printf("11 is present..");
}
else
{
    printf("11 is absent..");
}

free(ptr);
return 0;
}

```

## OUTPUT:



```

C:\> Command Prompt
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>q3.exe
Enter number of elements you want to enter:
6
Enter elements of array:
85
66
11
80
93
88
11 is present..
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>q3.exe
Enter number of elements you want to enter:
6
Enter elements of array:
85
66
3
80
93
88
11 is absent..
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>

```

**Q.4 Accept n number from user and return frequency of 11.**

**Ans.**

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

int Frequency(int Arr[],int iSize)
{
    int iCnt=0,iFreq=0;

    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if(Arr[iCnt]==11)
        {
            iFreq++;
        }
    }

    return iFreq;
}

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

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

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

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

    int iRet=Frequency(ptr,iLength);

    printf("11 is present in array %d times.", iRet);

    free(ptr);
    return 0;
}
```

## OUTPUT:

```
Command Prompt

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>q4exe
Enter number of elements you want to enter:
6
Enter elements of array:
85
66
3
15
93
88
11 is present in array 0 times.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>q4exe
Enter number of elements you want to enter:
6
Enter elements of array:
85
11
3
15
11
111
11 is present in array 2 times.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>
```

**Q.5 Accept n numbers and a single number and check frequency of that single number.**

**Ans.**

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

int Frequency(int Arr[],int iSize,int iNo)
{
    int iCnt=0,iFreq=0;

    for(iCnt=0;iCnt<iSize;iCnt++)
    {
        if(Arr[iCnt]==iNo)
        {
            iFreq++;
        }
    }

    return iFreq;
}

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

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

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

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

    printf("Enter number you want to check frequency of: ");
```



```
scanf("%d",&iNo);

int iRet=Frequency(ptr,iLength,iNo);

printf("%d is present in array %d times.",iNo,iRet);

free(ptr);
return 0;
}
```

## OUTPUT:

```
Command Prompt

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>q5.exe
Enter number of elements you want to enter:
6
Enter elements of array:
85
66
3
66
93
88
Enter number you want to check frequency of: 66
66 is present in array 2 times.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>q5.exe
Enter number of elements you want to enter:
6
Enter elements of array:
85
11
3
15
11
111
Enter number you want to check frequency of: 12
12 is present in array 0 times.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 15>
```