**Assignment-10**

**1. Accept N number from user and return frequency of even numbers.**

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

int CountEven(int Arr[],int iLength)
{
  int iCnt = 0;
  int iCount = 0;


  for(iCnt = 0 ; iCnt < iLength; iCnt++)
  {
    if((Arr[iCnt] % 2) == 0)
    {
      iCount++;
    }
  }

    return iCount;
}
int main()
{
   int iSize = 0;
   int *p = NULL;
   int iCnt = 0;
   int iRet = 0;

   printf("Enter number of Elements : \n");
   scanf("%d",&iSize);

   p = (int*)malloc(iSize * sizeof(int));

   if(p == NULL)
   {
      printf("Unable to allocate memory");
      return -1;
   }
   printf("Enter the Elements : \n");

   for(iCnt = 0; iCnt < iSize; iCnt++)
   {
      scanf("%d",&p[iCnt]);
   }
```

```
   printf("Elements of Array are : \n");

    for(iCnt = 0; iCnt < iSize; iCnt++)
    {
        printf("%d\t",p[iCnt]);
    }
    printf("\n");

     iRet = CountEven(p, iSize);

     printf("Result is %d \n",iRet);

     free(p);




    return 0;
}
```

**OUTPUT :**

gcc A10Program1.c -o Myexe

**1 ./Myexe**
Enter number of Elements :
6
Enter the Elements :
85 66 3 80 93 88
Elements of Array are :
85 66 3 80 93 88
Result is 3

**2. Accept N number from user and return difference between frequency of even number and odd numbers.**

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

int Frequency(int Arr[],int iLength)
{
   int iCnt = 0;
   int iCount1 = 0;
   int iCount2 = 0;
   int iDiff= 0;


   for(iCnt = 0 ; iCnt < iLength; iCnt++)
   {
      if((Arr[iCnt] % 2) == 0)
      {
         iCount1++;
      }
       if((Arr[iCnt] % 2) != 0)
      {
         iCount2++;
      }

      iDiff = iCount1 - iCount2;
   }

      return iDiff;
}
int main()
{
    int iSize = 0;
    int *p = NULL;
    int iCnt = 0;
    int iRet = 0;

    printf("Enter number of Elements : \n");
    scanf("%d",&iSize);

    p = (int*)malloc(iSize * sizeof(int));

    if(p == NULL)
    {
        printf("Unable to allocate memory");
        return -1;
    }
    printf("Enter the Elements : \n");

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

```
        scanf("%d",&p[iCnt]);
    }



   printf("Elements of Array are : \n");

    for(iCnt = 0; iCnt < iSize; iCnt++)
    {
        printf("%d\t",p[iCnt]);
    }
    printf("\n");

     iRet = Frequency(p, iSize);

     printf("Result is %d \n",iRet);

     free(p);




    return 0;
}
```

**OUTPUT :**

gcc A10Program2.c -o Myexe

**1 ./Myexe**
Enter number of Elements :
7
Enter the Elements :
85 66 3 80 93 88 90
Elements of Array are :
85 66 3 80 93 88 90
Result is 1

**3. Accept N number from user check whether that numbers contains 11 in it or not.**

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

#define TRUE 1
#define FALSE 0

typedef int BOOL;

BOOL Check(int Arr[],int iLength)
{
   int iCnt = 0;
   for(iCnt = 0; iCnt < iLength; iCnt++)
   {
      if(Arr[iCnt] == 11)
      {
         break;
      }

   }

   if(Arr[iCnt]== 11)
   {
      return TRUE;
   }
   else
   {
      return FALSE;
   }

}

int main()
{

   int iSize = 0;
   int *p = NULL;
   int iCnt = 0;
   BOOL bRet = FALSE;

   printf("Enter number of Elements : \n");
   scanf("%d",&iSize);

   p = (int*) malloc (iSize * sizeof(int));

   printf("Enter the Elements :\n");
```

```
    for(iCnt = 0; iCnt < iSize; iCnt++)
    {
        scanf("%d",&p[iCnt]);

    }

    bRet = Check(p , iSize);

    if(bRet == TRUE)
    {
        printf("11 is Present \n");
    }
    else
    {
        printf("11 is Absent \n");
    }

    free(p);


    return 0;

}
```

**OUTPUT :**

gcc A10Program3.c -o Myexe

**1 ./Myexe**

Enter number of Elements :
6
Enter the Elements :
85 66 11 80 93 88
11 is Present

**2 ./Myexe**

Enter number of Elements :
6
Enter the Elements :
85 66 3 80 93 88
11 is Absent

**4. Accept N number from user and return frequency of 11 from it.**

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



int Frequency(int Arr[],int iLength)
{
   int iCnt = 0;
   int iCount = 0;
   for(iCnt = 0; iCnt < iLength; iCnt++)
   {
      if(Arr[iCnt] == 11)
      {
         iCount ++;
      }

   }

    return iCount;
}

int main()
{

   int iSize = 0;
   int *p = NULL;
   int iCnt = 0;
   int iRet = 0;

   printf("Enter number of Elements : \n");
   scanf("%d",&iSize);

   p = (int*) malloc (iSize * sizeof(int));

   printf("Enter the Elements :\n");

   for(iCnt = 0; iCnt < iSize; iCnt++)
   {
      scanf("%d",&p[iCnt]);

   }

   iRet = Frequency(p , iSize);

   printf("%d \n",iRet);



   free(p);
```

```
    return 0;

}
```

**OUTPUT :**

gcc A10Program4.c -o Myexe

**1 ./Myexe**
Enter number of Elements :
6
Enter the Elements :
85 66 3 15 93 88
0

**2 ./Myexe**
Enter number of Elements :
6
Enter the Elements :
85 11 3 15 11 111
2

**5.Accept N numbers from user and accept one another number as NO,return frequency of NO from it.**

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



int Frequency(int Arr[],int iLength ,int iNO)
{
   int iCnt = 0;
   int iCount = 0;
   for(iCnt = 0; iCnt < iLength; iCnt++)
   {
      if(Arr[iCnt] == iNO)
      {
         iCount ++;
      }

   }

    return iCount;
}

int main()
{

   int iSize = 0;
   int *p = NULL;
   int iCnt = 0;
   int iRet = 0;
   int iValue = 0;

   printf("Enter number of Elements :\n");
   scanf("%d",&iSize);

   printf("Enter the number: \n ");
   scanf("%d",&iValue);

   p = (int*) malloc (iSize * sizeof(int));

   printf("Enter the Elements :\n");

   for(iCnt = 0; iCnt < iSize; iCnt++)
   {
      scanf("%d",&p[iCnt]);

   }

   iRet = Frequency(p , iSize, iValue);
```

```
    printf("%d \n",iRet);


    free(p);


    return 0;

}
```

**OUTPUT :**

```
 gcc A10Program5.c -o Myexe
```

**1./Myexe**

```
Enter number of Elements :
6
Enter the number:
 66
Enter the Elements :
85 66 3 66 93 88
2
```

**2./Myexe**

```
Enter number of Elements :
6
Enter the number:
 12
Enter the Elements :
85 11 3 15 10 111
0
```