Assignment-9

1. Accept N number from user and return difference between summation of even elements and summation of odd elements.

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

int Difference(int Arr[],int iLength)
{
   int iCnt = 0;
   int iSum1 = 0;
   int iSum2 = 0;
   int iDiff = 0;

   for(iCnt = 0 ; iCnt < iLength; iCnt++)
   {
      if((Arr[iCnt] % 2) == 0)
      {
         iSum1= iSum1 + Arr[iCnt];
      }
      if((Arr[iCnt] % 2) != 0)
      {
         iSum2 = iSum2 + Arr[iCnt];
      }

      iDiff = iSum1 -iSum2 ;
   }

      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 = Difference(p, iSize);

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

     free(p);




    return 0;
}
```

OUTPUT :

```
gcc A9Program1.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 53
```

2. Accept N number from user and display all such elements which are divisible by 5.

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

void Display(int Arr[],int iLenght)
{
   int iCnt = 0;
   for(iCnt = 0; iCnt < iLenght; iCnt++)
   {
      if((Arr[iCnt] % 5) == 0)
      {
         printf("%d \n", Arr[iCnt]);
      }

   }

}

int main()
{
   int iSize = 0, iCnt = 0;
   int *p = NULL;

   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]);
   }
   Display(p,iSize);

   free(p);

   return 0;

}
```

OUTPUT :

gcc A9Program2.c -o Myexe

1 ./Myexe
Enter number of Elements :
6
Enter the Elements :
85 66 3 80 93 88
85 80

3. Accept N number from user and display all such elements which are even and divisible by 5.

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

void Display(int Arr[],int iLenght)
{
   int iCnt = 0;
   for(iCnt = 0; iCnt < iLenght; iCnt++)
   {
      if((Arr[iCnt] % 2) == 0)
      {
         if((Arr[iCnt] % 5) == 0)
         {
         printf("%d \n", Arr[iCnt]);
         }
      }

   }

}

int main()
{
   int iSize = 0, iCnt = 0;
   int *p = NULL;

   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]);
   }
   Display(p,iSize);

   free(p);

   return 0;

}
```

OUTPUT :

gcc A9Program3.c -o Myexe

1 ./Myexe
Enter number of Elements :
6
Enter the Elements :
85 66 3 80 93 88
80

3.Accept N number from user and display all such elements which are divisible by 3 and 5.

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

void Display(int Arr[],int iLenght)
{
   int iCnt = 0;
   for(iCnt = 0; iCnt < iLenght; iCnt++)
   {
      if(((Arr[iCnt] % 3) == 0) && ((Arr[iCnt] % 5) == 0))
      {

         printf("%d \n", Arr[iCnt]);

      }

   }

}

int main()
{
   int iSize = 0, iCnt = 0;
   int *p = NULL;

   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]);
   }
   Display(p,iSize);

   free(p);

   return 0;

}
```

OUTPUT :

gcc A9Program4.c -o Myexe

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

5. Accept N number from user and display all such elements which are multiples of 11.

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

void Display(int Arr[],int iLenght)
{
   int iCnt = 0;



   for(iCnt = 0; iCnt < iLenght; iCnt++)
   {
     if((Arr[iCnt] % 11) == 0 )
      {

        printf("%d \n",Arr[iCnt]);

      }

   }

}

int main()
{
   int iSize = 0, iCnt = 0;
   int *p = NULL;

   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]);
   }
   Display(p,iSize);

   free(p);

   return 0;



}
```

OUTPUT :

```
gcc A9Program5.c -o Myexe
```

1 ./Myexe

```
Enter number of Elements :
6
Enter the Elements :
85 66 3 55 93 88
66
55
88
```