1 . Write a program which accept number from user and return the count of even digits.

```c
#include<stdio.h>

int CountEven(int iNo)
{
   int iDigit = 0;
   int iCount = 0;
   if(iNo < 0)
   {
      iNo = -iNo;
   }

   while(iNo != 0)
   {
      iDigit = iNo % 10;

      if((iDigit % 2) == 0)
      {
         iCount++;
      }
      iNo = iNo / 10;

   }
    return iCount;

}

int main()
{
   int iValue = 0;
   int iRet = 0;

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

   iRet = CountEven(iValue);

   printf("%d \n",iRet);
   return 0;
}
```

OutPut :

gcc A8program1.c -o Myexe

1 ./Myexe
Enter Number :
2395
1

2 ./Myexe
Enter Number :
1018
2

3 ./Myexe
Enter Number :
-1018
2

4 ./Myexe
Enter Number :
8462
4

2. Write a program which accept number from user and return the count of odd digits.

```c
#include<stdio.h>

int CountOdd(int iNo)
{
    int iDigit = 0;
    int iCount = 0;
    if(iNo < 0)
    {
        iNo = -iNo;
    }

    while(iNo != 0)
    {
        iDigit = iNo % 10;

        if((iDigit % 2) != 0)
        {
            iCount++;
        }
        iNo = iNo / 10;

    }
     return iCount;

}

int main()
{
    int iValue = 0;
    int iRet = 0;

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

    iRet = CountOdd(iValue);

    printf("%d \n",iRet);
    return 0;
}
```

OutPut :
 gcc A8program2.c -o Myexe

1 ./Myexe
Enter Number :
2395
3

2 ./Myexe
Enter Number :
1018
2

3 ./Myexe
Enter Number :
-1018
2

4 ./Myexe
Enter Number :
8462
0

3. Write a program which accept number from user and return the count of digits in between 3 and 7.

```c
#include<stdio.h>

int CountRange(int iNo)
{
   int iDigit = 0;
   int iCount = 0;


   while(iNo != 0)
   {
     iDigit = iNo % 10;

     if((iDigit > 3)  && (iDigit < 7) )
     {
        iCount++;
     }
     iNo = iNo / 10;

   }
    return iCount;

}

int main()
{
   int iValue = 0;
   int iRet = 0;

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

   iRet =CountRange(iValue);

   printf("%d \n",iRet);
   return 0;
}
```

OutPut :
gcc A8program3.c -o Myexe

1 ./Myexe
Enter Number :
2395
1

2 ./Myexe
Enter Number :
1018
0

3 ./Myexe
Enter Number :
4521
2

4 ./Myexe
Enter Number :
9922
0

5. Write a program which accept number from user and return difference between summation of even digits and summation of odd digits.

```c
#include<stdio.h>

int CountDiff(int iNo)
{
    int iDigit = 0;
    int iSum1 = 0;
    int iSum2 = 0;
    int iResult = 0;

    while(iNo != 0)
    {
        iDigit = iNo % 10;
        if((iDigit % 2) == 0)
        {
            iSum1 = iSum1 + iDigit;
        }
        if((iDigit % 2) != 0)
        {
            iSum2 = iSum2 + iDigit;
        }

        iResult = iSum1 - iSum2;
        iNo = iNo / 10;

    }
    return iResult;

}

int main()
{
    int iValue = 0;
    int iRet = 0;

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

    iRet = CountDiff(iValue);

    printf("%d \n",iRet);
    return 0;
}
```

OutPut :

gcc A8program5.c -o Myexe

1 ./Myexe
Enter Number :
2395
-15

2 ./Myexe
Enter Number :
1018
6

3 ./Myexe
Enter Number :
8440
16

4 ./Myexe
Enter Number :
5733
-18

4. Write a program which accept number from user and return multiplication of all digits.

```c
#include<stdio.h>

int MultDigits(int iNo)
{
   int iDigit = 0;
   int iMul = 1;


   while(iNo != 0)
   {

      iDigit = iNo % 10;

      if(iDigit!=0){
         iMul = iMul * iDigit;
      }


      iNo = iNo / 10;

   }
    return iMul;

}

int main()
{
   int iValue = 0;
   int iRet = 0;

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

   iRet =MultDigits(iValue);

   printf("%d \n",iRet);
   return 0;
}
```

OutPut :
gcc A8program4.c -o Myexe

1 ./Myexe
Enter Number :
2395
270

2 ./Myexe
Enter Number :
1018
8

3 ./Myexe
Enter Number :
9440
144

4 ./Myexe
Enter Number :
922432
864