Assignment 6

. Write a program to calculate sum of first N natural numbers.

#include<stdio.h>

int main()

{

 int i,n,s=0;

 printf("Enter a number");

 scanf("%d", &n);

 for ( i = 0; i <= n; i++)

 {

    s=s+i;

 }

  printf("%d ", s);

}

2. Write a program to calculate sum of first N even natural numbers

#include<stdio.h>

int main()

{

    int n, sum=0, i=2;

    printf("Enter a Number\n");

    scanf("%d", &n);

    while (i<=n\*2)

    {

        sum=i+sum;

        i=i+2;

    }

    printf("%d\n", sum);

}

3. Write a program to calculate sum of first N odd natural numbers

#include<stdio.h>

int main()

{

    int n, sum=0, i=1;

    printf("Enter a Number\n");

    scanf("%d", &n);

    while (i<=n\*2)

    {

        sum=i+sum;

        i=i+2;

    }

    printf("%d\n", sum);

}

4. Write a program to calculate sum of squares of first N natural numbers

#include<stdio.h>

int main()

{

    int n, sum=0, i=1;

    printf("Enter a Number\n");

    scanf("%d", &n);

    while (i<=n)

    {

        sum=i\*i+sum;

        i=i+1;

    }

    printf("%d\n", sum);

}

5. Write a program to calculate sum of cubes of first N natural numbers

#include<stdio.h>

int main()

{

    int n, sum=0, i=1;

    printf("Enter a Number\n");

    scanf("%d", &n);

    while (i<=n)

    {

        sum=i\*i\*i+sum;

        i=i+1;

    }

    printf("%d\n", sum);

}

6. Write a program to calculate factorial of a number

#include<stdio.h>

int main()

{

    int n, sum=0, i=1;

    printf("Enter a Number\n");

    scanf("%d", &n);

    int f=n;

    while (i<n)

    {

        f=f\*i;

        i=i+1;

    }

    printf("%d\n", f);

}

7. Write a program to count digits in a given number

#include<stdio.h>

int main()

{

   int a=0, n;

   printf("Enter a number\n");

   scanf("%d", &n);

   while (n!=0)

   {

      n=n/10;

      a++;

   }

   printf("%d", a);

}

8. Write a program to check whether a given number is a Prime number or no

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a Number\n");

    scanf("%d", &n);

    int i=2;

    while (i<n)

    {

        if (n%i==0)

           {

             break;

           }

           i++;

    }

    if (i==n)

       printf("Prime Number\n");

    else

     printf("Not A Prime Number\n");

}

9. Write a program to calculate LCM of two numbers

#include<stdio.h>

int main()

{

   int n1, n2, max;

   printf("Enter two number:");

   scanf("%d %d", &n1, &n2);

   max = (n1>n2)?n1:n2;

   while (1)

   {

         if (max%n1==0 && max%n2==0)

         {

            printf("LCM of %d and %d id %d.", n1, n2, max);

            break;

         }

         ++max;

   }

}

10. Write a program to reverse a given number

#include<stdio.h>

int main()

{

 int i,n;

 printf("Enter a number");

 scanf("%d", &n);

 for ( i = 1; i <= n-1; i++)

 {

   int s=n-i;

   printf("%d ", s);

 }

}