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

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

  int n,sum=0;

  printf("Input value of n: ");

  scanf("%d",&n);

  for (int  i = 1; i <=n; i++)

  {

    sum=sum+i;

  }

  printf("Sum of %d natural numbers: %d ",n,sum);

    getch();

    return 0;

}

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

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

   int n,sum=0;

  printf("Input value of n: ");

  scanf("%d",&n);

  for (int  i = 1; i <= 2\*n; i++)

  {

    if(i%2==0)

    sum=sum+i;

  }

  printf("%d ",sum);

    getch();

    return 0;

}

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

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

   int i,n,sum=0;

  printf("Input value of n: ");

  scanf("%d",&n);

   for (int  i = 1; i <= 2\*n; i++)

   {

    if(i&1==1)

    {

        sum=sum+i;

    }

   }

    printf("%d ",sum);

    getch();

    return 0;

}

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

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

 int n,sum=0;

  printf("Input value of n: ");

  scanf("%d",&n);

printf("Sum of square of first %d natural numbers:\n",n);

  for (int  i = 1; i <= n; i++)

  {

    sum=sum+i\*i;

  }

  printf("%d",sum);

    getch();

    return 0;

}

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

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

 int n,sum=0;

  printf("Input value of n: ");

  scanf("%d",&n);

printf("Sum of cube of first %d natural numbers:\n",n);

  for (int  i = 1; i <= n; i++)

  {

    sum=sum+i\*i\*i;

  }

  printf("%d",sum);

    getch();

    return 0;

}

1. Write a program to calculate factorial of a number.

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

  int n,fact=1;

  printf("Input a number: ");

  scanf("%d",&n);

  for (int  i = 1; i <=n; i++)

  {

    fact=fact\*i;

  }

  printf("Factorial of %d : %d ",n,fact);

    getch();

    return 0;

}

1. Write a program to count digit in a given number.

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

  int n,rem,d=0,k;

  printf("Input a number: ");

  scanf("%d",&n);

  k=n;

  while (1)

  {

    n=n/10;

    d++;

    if(n==0)

    break;

  }

  printf("Number of digits in %d : %d ",k,d);

    getch();

    return 0;

}

1. Write a program to check whether a given number is a Prime number or not.

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

  int n,i;

  printf("Input value of n: ");

  scanf("%d",&n);

  for (  i = 2; i <=n-1; i++)

  {

    if(n%i==0)

    break;

  }

  if(i==n)

  printf("Prime");

  else

  printf("Not prime");

    getch();

    return 0;

}

1. Write a program to calculate LCM of two numbers.

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

    int n1,n2,k;

    printf("Input two numbers: ");

    scanf("%d%d",&n1,&n2);

    while(1)

    {

    for (int i = 1; i <= n2; i++)

    {

        k=i\*n1;

        if(k%n2==0)

        break;

    }

      break;

    }

    printf("LCM of %d and %d is %d\n",n1,n2,k);

    getch();

    return 0;

}

1. Write a program to reverse a given number.

ANS:-

#include<stdio.h>

#include<conio.h>

int main()

{

    int n,rem,num=0;

  printf("Input value of n: ");

  scanf("%d",&n);

  for (int  i = 1; i <= 10; i++)

  {

    rem=n%10;

    num=num\*10+rem;

    n=n/10;

    if (n==0)

    {

       break;

    }

  }

  printf("Number in reverse:  %d",num);

    getch();

    return 0;

}