Assignment 6

Name : Soham Ghone

Question 1

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

#include<stdio.h>

int main()

{

    int i,num,sum;

    printf("Enter an numner : ");

    scanf("%d",&num);

    for(i=1;i<=num;i+=2)

    {

        sum = sum + i;

    }

    printf("%d\n",sum);

    return 0;

}

Question 2

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

#include<stdio.h>

int main()

{

    int i,num,sum;

    printf("Enter an number : ");

    scanf("%d",&num);

    for(i=2;i<=num;i+=2)

    {

        sum = sum + i;

    }

    printf("%d\n",sum);

    return 0;

}

Question 3

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

#include<stdio.h>

int main()

{

    int i,num,sum;

    printf("Enter an number : ");

    scanf("%d",&num);

    for(i=1;i<=num;i+=2)

    {

        sum = sum +i;

    }

    printf("%d\n",sum);

    return 0;

}

Question 4

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

#include<stdio.h>

int main()

{

    int i,sum,num;

    printf("Enter an number : ");

    scanf("%d",&num);

    for(i=1;i<=num;i++)

    {

        sum =sum+i\*i;

    }

    printf("%d\n",sum);

    return 0;

}

Question 5

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

#include<stdio.h>

int main()

{

    int i,num,sum;

    printf("Enter an number : ");

    scanf("%d",&num);

    for(i=1;i<=num;i++)

    {

        sum = sum + i\*i\*i;

    }

    printf("%d\n",sum);

    return 0;

}

Question 6

//Write a program to calculate factorial of a number

#include<stdio.h>

int main()

{

    int i,num,fact=1;

    printf("Enter an number : ");

    scanf("%d",&num);

    for(i=1;i<=num;i++)

    {

        fact=fact\*i;

    }

    printf("Factorial of %d is %d\n",num,fact);

    return 0;

}

Question 7

//Write a program to count digits in a given number

#include<stdio.h>

int main()

{

    int n,cout=0;

    printf("Enter an number : ");

    scanf("%d",&n);

    while(n!=0)

    {

        n=n/10;

        cout++;

    }

    printf("Digits in a given number is %d",cout);

    return 0;

}

Question 8

/\*Write a program to check whether a given number is a Prime number or

not\*/

#include<stdio.h>

int main()

{

    int num;

    printf("Enter a number : ");

    scanf("%d",&num);

    if(num%2==0)

    {

        printf("PRIME\n");

    }

    else{

        printf("NOT PRIME\n");

    }

    return 0;

}

Question 9

//Write a program to calculate LCM of two numbers

#include<stdio.h>

int main()

{

    int i,n,num1,num2,gcd,LCM;

    printf("Enter num1 and num2 : \n");

    scanf("%d%d",&num1,&num2);

    for(i=1;i<=num1 && i<=num2;i++)

    {

        if(num1%i==0 && num2%i==0)

        {

            gcd=i;

        }

    }

    LCM = (num1\*num2)/gcd;

    printf("LCM of %d and %d is %d",num1,num2,LCM);

    return 0;

}

Question 10

//Write a program to reverse a given number

#include<stdio.h>

int main()

{

    int num,remainder,reverse;

    printf("Enter an number : ");

    scanf("%d",&num);

    while(num!=0)

    {

        remainder = num%10;

        reverse = reverse \* 10 + remainder;

        num = num/10;

    }

    printf("The reverse given number is %d",reverse);

    return 0;

}