Assignment – 6

Use any loop

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

#include<stdio.h>

int main()

{

    int n, s=0, i;

    printf("enetr a natural no \n");

    scanf("%d",&n);

    for(i=1;i<=n; i++)

        s=s+i;

        printf("%d\n",s);

    return 0;

}

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

#include<stdio.h>

int main()

{

    int n,s=0,i;

    printf("enete a first even natural no");

    scanf("%d",&n);

    for(i=2;i<=n;i=i+2)

    s=s+i;

    printf("%d\n",s);

    return 0;

}

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

#include<stdio.h>

int main()

{

    int n,s=0,i;

    printf("enetr a odd natural no");

    scanf("%d",&n);

    for(i=1;i<=n;i=i=i+2)

    s=s+i;

    printf("%d\n",s);

    return 0;

}

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

#include<stdio.h>

int main()

{

    int n, s=0,i;

    printf("eneter a squares of first natural number \n");

    scanf("%d",&n);

    for (i=1;i<=n;i++)

    s+=(i\*i);

    printf("%d\n",s);

    return 0;

}

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

#include<stdio.h>

int main()

{

    int n, s=0,i;

    printf("enter a cubes of natural number");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    s+=(i\*i\*i);

    printf("%d\n",s);

    return 0;

}

// 6. Write a program to calculate factorial of a number

#include<stdio.h>

int main()

{

    int i,s=1,n;

    printf("eneter a number\n");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    s=s\*i;

    printf(" is a factorail no %d",s);

    return 0;

}

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

#include<stdio.h>

int main()

{

    int i;

    int count=0;

    printf("enter a digit");

    scanf("%d",&i);

    while(i!=0)

    {

        i=i/10;

        count++;

        printf("its counta digit given no %d",count);

    }

    return 0;

}

// 8. Write a program to check whether a given number is a Prime number or

// not

#include<stdio.h>

int main()

{

    int x, i;

    printf("enetr a no");

    scanf("%d",&x);

for(i=2;i<=x-1;i++)

if(x%i==0)

break;

if(i==x)

printf("%d its a primr no",x);

else{

    printf("%d its not a prime no",x);

}

return 0;

}

// 9. Write a program to calculate LCM of two numbers

#include<stdio.h>

 int main()

 {

     int n1,n2,max;

     printf("enter a two no");

     scanf("%d %d",&n1,&n2);

     max= (n1>n2)? n1: n2;

     while(1){

     if((max%n1==0) && (max%n2==0)){

         printf("the lcm of %d and%d  is %d",n1,n2,max);

         break;

     }

     ++max;

}

     return 0;

 }

// 10. Write a program to reverse a given number

#include<stdio.h>

int main()

{

    int y,x,r;

    printf("enetr a no");

    scanf("%d",&x);

while(x!=0){

r=x%10;

y=y\*10+r;

x=x/10;

printf("%d is a reverse order",y);

}

return 0;

}