**ASSIGNMENT 11**

***Q1. Write a program to calculate sum of first N natural numbers.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,sum=0;*

*scanf("%d",&n);*

*for(i=1;i<=n;i++)*

*{*

*sum+=i;*

*}*

*printf("%d",sum);*

*return 0;*

*}*

***Q2. Write a program to calculate sum of first N even natural numbers.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,sum=0;*

*scanf("%d",&n);*

*for(i=2;i<=2\*n;i+=2)*

*{*

*sum+=i;*

*}*

*printf("%d",sum);*

*return 0;*

*}*

***Q3. Write a program to calculate sum of first N odd natural numbers.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,sum=0;*

*scanf("%d",&n);*

*for(i=1;i<=2\*n;i+=2)*

*{*

*sum+=i;*

*}*

*printf("%d",sum);*

*return 0;*

*}*

***Q4. Write a program to calculate sum of squares of first N natural numbers.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,sum=0;*

*scanf("%d",&n);*

*for(i=1;i<=n;i++)*

*{*

*sum+=i\*i;*

*}*

*printf("%d",sum);*

*return 0;*

*}*

***Q5. Write a program to calculate sum of cubes of first N natural numbers.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,sum=0;*

*scanf("%d",&n);*

*for(i=1;i<=n;i++)*

*{*

*sum+=i\*i\*i;*

*}*

*printf("%d",sum);*

*return 0;*

*}*

***Q6. Write a program to calculate factorial of a number.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,fact=1;*

*scanf("%d",&n);*

*if(n==1)*

*{*

*fact=0;*

*}*

*else*

*{*

*for(i=n;i>1;i--)*

*{*

*fact=fact\*i;*

*}*

*}*

*printf("Factorial is: %d",fact);*

*return 0;*

*}*

***Q7. Write a program to count digits in a given number.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,count=0;*

*scanf("%d",&n);*

*while(n>0)*

*{*

*n=n/10;*

*count++;*

*}*

*printf("No.of digits= %d",count);*

*return 0;*

*}*

***Q8. Write a program to check whether a given number is a Prime number or not.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n,flag=1;*

*scanf("%d",&n);*

*for(i=2;i<n/2;i++)*

*{*

*if(n%i==0)*

*{*

*flag=0;*

*break;*

*}*

*}*

*if(flag==0)*

*{*

*printf("It is not a prime number.");*

*}*

*else*

*{*

*printf("It is a Prime number.");*

*}*

*return 0;*

*}*

***Q9. Write a program to calculate LCM of two numbers.***

*#include <stdio.h>*

*int main()*

*{*

*int i,n1,n2,gcd,lcm;*

*scanf("%d%d",&n1,&n2);*

*for(i=1;i<=n1 && i<=n2;i++)*

*{*

*if(n1%i==0 && n2%i==0)*

*{*

*gcd=i;*

*}*

*}*

*lcm=(n1\*n2)/gcd;*

*printf("LCM= %d",lcm);*

*return 0;*

*}*

***Q10. Write a program to reverse a given number.***

*#include <stdio.h>*

*int main()*

*{*

*int i,num,re\_num=0;*

*scanf("%d",&num);*

*while(num!=0)*

*{*

*re\_num=re\_num\*10+num%10;*

*num=num/10;*

*}*

*printf("Reverse no.=%d",re\_num);*

*return 0;*

*}*