**ASSIGNMENT 6**

**------------------------------------------------------------------------------------------------------------------**

**/\* to calculate sum of N natural numbers \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int n,i,sum=0;**

**printf("Enter natural number");**

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

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

**s=s+i;**

**printf("sum is %d", n,s);**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------**

**/\* to calculate sum of first N even numbers \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int n,i,sum=0;**

**printf("Enter n even number");**

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

**for(i=0 ; i<=n; i+2)**

**s=s+i;**

**printf("sum is %d", n,s);**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------**

**/\* to calculate sum of first N odd numbers \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int n,i,sum=0;**

**printf("Enter n even number");**

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

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

**{**

**printf("%d", 2\*i-1);**

**sum+ = 2\*i-1;**

**}**

**printf("sum of odd natural number : %d\n" , n,sum);**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------**

**/\* to calculate sum of square of first N natural number \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int i=1, n, s=0;**

**printf("Enter first natural number");**

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

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

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

**{**

**printf("Sum of square of number is %d", sum);**

**}**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------**

**/\* to calculate sum of cube of first N natural number \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int i=1, n, s=0;**

**printf("Enter first natural number");**

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

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

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

**{**

**printf("Sum of square of number is %d", sum);**

**}**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------/\* to calculate factorial of a number \*/**

**#include<stdio.h>**

**int main()**

**{**

**int i, fact=1, n;**

**printf("Enter a number");**

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

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

**{**

**fact=fact\*i**

**}**

**printf("factorial of %d is %d", fact,n);**

**}**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------**

**/\* to count digits in a given number \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int n;**

**int count=0;**

**printf("Enter a number");**

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

**while(n!=0)**

**{**

**n=n/10;**

**count++;**

**}**

**printf("\n the number of digit in a number is: %d", count);**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------**

**/\* to check a given number is prime or not \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int n,i, c=0;**

**printf("Enter any number n:");**

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

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

**{**

**if(n%i==0)**

**{**

**c++;**

**}**

**}**

**if(c==2)**

**{**

**printf("n is prime number");**

**}**

**else**

**printf(" n is not prime number");**

**return 0;**

**}**

**-------------------------------------------------------------------------------------------------------------------**

**/\* to calculate LCM of two number \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int a,b,c;**

**printf("Enter two number");**

**scanf(%d %d", &a, &b);**

**c = (a>b)? a:b;**

**while(1)**

**{**

**if(c%a==0 && c%b==0)**

**{**

**printf ( the LCM of %d and %d", a,b,c);**

**break;**

**}**

**++c**

**}**

**return 0;**

**}**

**------------------------------------------------------------------------------------------------------------------**

**/\* to reverse a given number \*/**

**#Include<stdio.h>**

**int main()**

**{**

**int n, reverse=0, r;**

**printf("Enter an Integer");**

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

**while(n!=0)**

**{**

**r=n%10;**

**reverse= reverse\*10+10;**

**n/=10;**

**}**

**printf("reversed number = %d", reverse);**

**return 0;**

**}**

**------------------------------------------------------------------------------------------------------------------**