**Assignment 6**

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

**#include<stdio.h>**

**int main()**

**{**

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

**printf(“Enter a number “);**

**scanf(“%d”,&n);**

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

**{**

**sum=sum+i;**

**}**

**printf(“sum of first %d natural number is %d “,n,sum);**

**return 0;**

**}**

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

**#include<stdio.h>**

**int main()**

**{**

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

**printf(“How many even numbers you want to print and calculate “);**

**scanf(“%d”,&n);**

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

**{**

**if(i%2==0)**

**sum=sum+i;**

**}**

**printf(“sum of first %d even natural numbers is %d “,n,sum);**

**return 0;**

**}**

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

**#include<stdio.h>**

**int main()**

**{**

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

**printf(“Enter numbers you want to calculate only odd numbers “);**

**scanf(“%d”,&n);**

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

**{**

**if(i%2!=0)**

**sum=sum+i ;**

**}**

**printf(“sum of first %d odd natural numbers is %d “,n,sum);**

**return 0;**

**}**

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

**#include<stdio.h>**

**int main()**

**{**

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

**printf(“Enter a number “);**

**scanf(“%d”,&n);**

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

**{**

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

**}**

**printf(“sum of square of first %d natural numbers is %d “,n,sum);**

**return 0;**

**}**

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

**#include<stdio.h>**

**int main()**

**{**

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

**printf(“Enter a number “);**

**scanf(“%d”,&n);**

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

**{**

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

**}**

**printf(“sum of cubes of first %d natural numbers is %d “, n,sum);**

**return 0;**

**}**

1. Write a program to calculate factorial of a number

**#include<stdio.h>**

**int main()**

**{**

**int num,i,fact;**

**printf(“Enter a number “);**

**scanf(“%d”,&num);**

**fact=num;**

**num=i;**

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

**{**

**fact=fact\*i;**

**}**

**printf(“factorial of %d is %d “,num,fact);**

**return 0;**

**}**

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

**#include<stdio.h>**

**int main()**

**{**

**int num,count=0,number;**

**printf(“Enter a number “);**

**scanf(“%d”,&number);**

**while(num%10!=0)**

**{**

**count++;**

**num=num/10;**

**}**

**printf(“number of digits in %d is %d “,number,count);**

**return 0;**

**}**

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

**#include<stdio.h>**

**int main()**

**{**

**int num,i=2;**

**printf(“Enter a number “);**

**scanf(“%d”,&num);**

**while(i<num)**

**{**

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

**{**

**printf(“Not a prime number “);**

**break;**

**}**

**i++;**

**}**

**if(i==num)**

**printf(“prime number “);**

**return 0;**

**}**

1. Write a program to reverse a given number

**#include<stdio.h>**

**int main()**

**{**

**int num,number,rev,temp;**

**printf(“Enter a number “);**

**scanf(“%d”,&number);**

**num=number;**

**while(num%10!=0)**

**{**

**temp=num%10;**

**rev=rev\*10+temp;**

**num=num/10;**

**}**

**printf(“Reverse of %d is %d “,number,rev);**

**return 0;**

**}**