**Use any loop**

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

#include<stdio.h>

int main ()

{

int N,i,sum=0;

printf(“Enter Nth number:”);

scanf(“%d”,&N);

for(i=1; i<=N; i++)

sum=sum+i;

printf(“sum of first %d natural numbers 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(“enter Nth number:”);

scanf(“%d”,&N);

for(i=2; i<=N; i+=2)

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 N,i,sum=0;

printf(“enter Nth number:”);

scanf(“%d”,&N);

for(i=1; i<=N; i+=2)

sum=sum+i;

printf(“sum of first %d odd natural numbers is %d”,N,sum);

return 0;

}

***4.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 Nth number:”);

scanf(“%d”,&N);

for(i=1; i<=N; i++)

sum=sum+i\*i;

printf(“sum of squares of first %d natural numbers is %d”,N,sum);

return 0;

}

***5.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 Nth 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;

}

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

#include<stdio.h>

int main ()

{

int N,i,fact=1;

printf(“enter Nth number:”);

scanf(“%d”,&N);

for(i=N; i>=1; i--)

fact=fact\*i;

printf(“factorial of %d is %d ”,N,fact);

return 0;

}

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

#include<stdio.h>

int main ()

{

int n,count=1;

printf(“enter a number:”);

scanf(“%d”,&n);

while(n/10!=0)

{

n=n/10;

count++;

}

printf(“this number is %d digits:”,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 n,i,count=0;

printf(“enter a number:');

scanf(“%d”,&n);

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

if(n%i==0)

count++;

if(count==2)

printf(“%d is prime number:”,n);

else

printf(“%d is not prime number:”,n);

return 0;

}

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

#include<stdio.h>

int main ()

{

int a,b,L;

printf(“enter two numbers:”);

scanf(“%d%d”,&a,&b);

for(L=1; L<=a\*b; L++)

if(L%a==0 && L%b==0)

break;

printf(“LCM of %d and %d is %d”,a,b,L);

return 0;

}

***10. Write a program to reverse a given nnumber***

#include<stdio.h>

int main ()

{

int n,rem,p=100,sum=0;

int q,num;

printf("Enter a number:");

scanf("%d",&n);

num=n;

while(n/10!=0)

{

rem=n%10; // 532%10=2

q=rem\*p; // q=2\*100=200

sum=sum+q;

n=n/10;

p=p/10;

}

printf(“%d is reversed of %d”,sum,num);

return 0;

}