Use any loop

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

#include<stdio.h>

int main()

{

int a,sum=0;

printf("enter the value of N: ");

scanf("%d",&a);

for(int i=1;i<=a;i++)

sum=sum+i;

printf("%d\n",sum);

return 0;

}

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

#include<stdio.h>

int main()

{

int a,sum=0;

printf("enter the value of N: ");

scanf("%d",&a);

for(int i=1;i<=a;i++)

sum=sum+i\*2;

printf("%d\n",sum);

return 0;

}

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

#include<stdio.h>

int main()

{

int a,sum=0;

printf("enter the value of N: ");

scanf("%d",&a);

for(int i=1;i<=a;i++)

sum=sum+i\*2-1;

printf("%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 a,sum=0;

printf("enter the value of N: ");

scanf("%d",&a);

for(int i=1;i<=a;i++)

sum=sum+i\*i;

printf("%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 a,sum=0;

printf("enter the value of N: ");

scanf("%d",&a);

for(int i=1;i<=a;i++)

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

printf("%d\n",sum);

return 0;

}

6. Write a program to calculate factorial of a number

#include<stdio.h>

int main()

{

int a,factorial=1;

printf("enter the value of N: ");

scanf("%d",&a);

for(int i=1;i<=a;i++)

factorial=factorial\*i;

printf("%d\n",factorial);

return 0;

}

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

#include<stdio.h>

int main()

{

int a,count=1;

printf("enter the number: ");

scanf("%d",&a);

while(a>=10)

{

a=a/10;

count++;

}

printf("%d\n",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 a,prime=1;

printf("enter the value: ");

scanf("%d",&a);

for(int i=2;i<=a/2;i++)

if(a%i==0)

{

prime=0;

break;;

}

if(prime)

printf("given number is prime");

else

printf("given number is not prime");

return 0;

}

9. Write a program to calculate LCM of two numbers

#include<stdio.h>

int main()

{

int a,b,lcm;

printf("enter the value of a,b: ");

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

lcm= (a>b)?a:b;

while(1)

{

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

{

printf("lcm of %d %d is %d",a,b,lcm);

break;

}

else

lcm++;

}

return 0;

}

10. Write a program to reverse a given number

#include<stdio.h>

int main()

{

int a,rev=0;

printf("enter any number: ");

scanf("%d",&a);

while(a)

{

rev=rev\*10;

rev=rev+(a%10);

a=a/10;

}

printf("reverse of given number is %d",rev);

return 0;

}