

//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 += i;
    }

    printf("Sum = %d", sum);
    return 0;
}
```

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

```
#include <stdio.h>

int main()
{
    int i,n,sum=0;

    printf("Enter a number :");
    scanf("%d",&n);

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

```

{
    printf("%d\n",2*i);
    sum=sum+2*i;
}

printf("Sum = %d",sum);

return 0;
}

```

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

```

#include <stdio.h>

int main()
{
    int i,n,sum=0;

    printf("Enter a number :");
    scanf("%d",&n);

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

    {
        printf("%d\n",2*i-1);
        sum=sum+2*i-1;
    }

    printf("Sum = %d",sum);

    return 0;
}

```

```
}
```

//4. Write a program to calculate sum of squares of first N natural numbers.

```
#include <stdio.h>
```

```
int main()
```

```
{
```

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

```
    printf("Enter a number :");
```

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

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

```
    {
```

```
        printf("%d\n",i*i);
```

```
        sum=sum+i*i;
```

```
    }
```

```
    printf("Sum = %d",sum);
```

```
    return 0;
```

```
}
```

//5. Write a program to calculate sum of cubes of first N natural numbers.

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```

int i,n,sum=0;

printf("Enter a number :");
scanf("%d",&n);

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

{
    printf("%d\n",i*i*i);
    sum=sum+i*i*i;
}

printf("Sum = %d",sum);

return 0;
}

```

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

```

#include <stdio.h>

int main()
{
    int i,n,fact=1;

    printf("Enter a number :");
    scanf("%d",&n);

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

    {

```

```
        fact=fact*i;
    }

    printf("Factorial = %d",fact);

    return 0;
}
```

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

```
#include <stdio.h>

int main()
{
    int n,count = 0;

    printf("Enter a number :");
    scanf("%d",&n);

    while(n!=0)
    {
        n=n%10;
        count++;
    }

    printf("Number of digit is %d",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,flag = 0;

    printf("Enter a number :");
    scanf("%d",&n);

    for(i=2; i<=n/2; i++)
    {
        if(n%i==0)
        {
            flag == 1;
            break;
        }
    }
    if(flag==1)
        printf("Not prime.");
    else
        printf("Prime.");
    return 0;
}
```

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

```

#include <stdio.h>

int main()
{
    int i , a , b;

    printf("Enter two numbers :");
    scanf("%d %d",&a,&b);

    for(i=1; i<=a*b; i++)

    {
        if((i%a==0) && (i%b==0))
            break;
    }

    printf("LCM is %d",i);

    return 0;
}

```

//10. Write a program to reverse a given number.

```

#include <stdio.h>

int main()
{
    int i , n , remainder , reverse;

    printf("Enter a number :");
    scanf("%d",&n);

```

```
while(n!=0)
{
    remainder=n%10;
    n=n/10;
    reverse=reverse*10+remainder;
}

printf("Reverse number is %d",reverse);

return 0;
}
```