

//Write program to count odd numbers from 1 to 100.

```
int count = 0;
for (int i = 1; i < 100; i += 2)
    count++;
Console.WriteLine(count);
```

//Write a program to display the multiplication table of a given integer.

```
int num = int.Parse(Console.ReadLine());
for (int i = 1; i <= 10; i++)
{
    Console.Write("{0} * {1} = {2}", i, num, i * num);
    Console.WriteLine();
}
```

//Write a program to calculate the factorial of a given number.

```
int num = int.Parse(Console.ReadLine());
int f = 1;
for (int i = num; i >= 1; i--)
{
    f = f * i;
}
Console.WriteLine(num + "! = " + f);
```

////Write a program to determine whether a given number is prime or not.

```
int num = int.Parse(Console.ReadLine());
int flag = 0;
for (int i = 2; i < num; i++)
{
    if (num % i == 0)
    {
        flag = 1;
        break;
    }
}
```

```
}  
if (flag == 0)  
    Console.WriteLine("Prime");  
else  
    Console.WriteLine("Not Prime");
```

//Write a program in to display the first n terms of Fibonacci series.

```
int len = int.Parse(Console.ReadLine());  
int a = 0, b = 1, c = 0;  
Console.Write("{0} {1} ", a, b);  
for (int i = 2; i < len; i++)  
{  
    c = a + b;  
    Console.Write(c + " ");  
    a = b;  
    b = c;  
}  
Console.WriteLine();
```

//A palindrome number is a number that is same after reverse. For example 121, 34543, 343, 131, 48984 are the palindrome numbers.

```
int n, r, sum = 0, temp;  
Console.Write("Enter the Number: ");  
n = int.Parse(Console.ReadLine());  
temp = n;  
while (n > 0)  
{  
    r = n % 10;  
    sum = (sum * 10) + r;  
    n = n / 10;  
}  
if (temp == sum)  
    Console.WriteLine("Number is Palindrome.");  
else  
    Console.WriteLine("Number is not Palindrome");
```

```
//Armstrong Number in C# - ex.. 153 & 371
int num, r, sum = 0, tmp;
Console.Write("Enter the Number= ");
num = int.Parse(Console.ReadLine());
tmp = num;
while (num > 0)
{
    r = num % 10;
    sum = sum + (r * r * r);
    num = num / 10;
}
if (tmp == sum)
    Console.WriteLine("Armstrong Number.");
else
    Console.WriteLine("Not Armstrong Number.");

// Sum of digits
int n, sum = 0, m;
Console.Write("Enter a number: ");
n = int.Parse(Console.ReadLine());
while (n > 0)
{
    m = n % 10;
    sum = sum + m;
    n = n / 10;
}
Console.WriteLine("Sum is= " + sum);

// swap two numbers without third variable
int a = 8, b = 9;
Console.WriteLine("Before swap a= " + a + " b= " + b);
a = a + b;
b = a - b;
a = a - b;
Console.WriteLine("After swap a= " + a + " b= " + b);
```

```
//Write a program to draw the following figure:
```

[illegible]

```
for (int k = 0; k < 10; k++)
{
    for (int i = 10 - k; i > 0; i--)
    {
        Console.Write("*");
    }
    Console.WriteLine();
}
```

```
//Write a program to draw the following figure:
```

[illegible]

```
for (int k = 0; k < 10; k++)  
{  
    for (int i = 0; i < 10 - k; i++)  
    {  
        Console.Write("*");  
    }  
    Console.WriteLine();  
}
```

//Write a program to draw the following figure:

```
*  
**  
***  
****  
*****  
*****  
*****  
*****  
*****  
*****  
*****
```

```
for (int k = 0; k < 10; k++)  
{  
    for (int i = 0; i <= k; i++)  
    {  
        Console.Write("*");  
    }  
    Console.WriteLine();  
}
```

//Write a program to draw the following figure:

(0,0) (0,1)
(1,0) (1,1)

```
int i = 0;
while (i < 2)
{
    int j = 0;
    while (j < 2)
    {
        Console.WriteLine("{0},{1} ", i, j);
        j++;
    }
    i++;
    Console.WriteLine();
}
```