

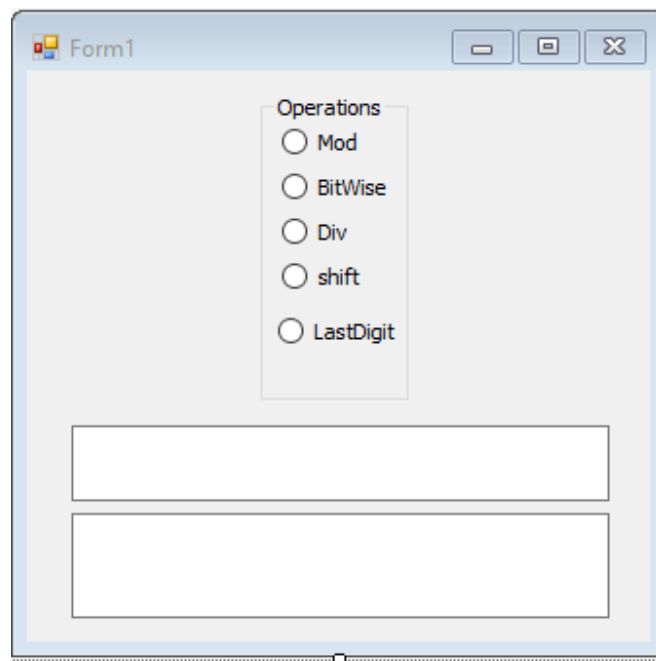
1. Write a window form application to display each of the following patterns in a multi-line textbox when a user click a button?

```
12345678987654321
123456787654321
1234567654321
12345654321
123454321
1234321
12321
121
1
```

```
1
121
12321
1234321
123454321
12345654321
1234567654321
123456787654321
```

2. Write and test a class that contains five different methods each of them can be used to to check if a number is odd or even.

Solution:



3. Write a class contains methods for performing arithmetic (adding, subtracting, multiplying, and evaluation) on single-variable polynomials with integer coefficients. Represent them as arrays of their coefficients as in the example below: $x^2 + 5 = 1x^2 + 0x + 5 \rightarrow [5,0,1]$. Test your class by writing a winform application that accepts the coefficients of the polynomials through multi-line textBoxes.

Solution:

4. Write a C# application to simulate InputBox method known from VB and VB.NET. Three different techniques are required to implement.

Testing

Write a C# winform application that can be used as a simple fraction calculator(+,-,*,/) and having the following interface. The two fraction numbers are inputted through a multi-line textbox and the output **in reduced form** is displayed through a messageBox. You have to write a simple C# class representing fractions. Your class have one constructor that takes values of numerator and denominator like: Fraction(1,5); //

for 1/5. Your class also have two readonly properties for numerator and denominator. Your class also have four operations for +, -, * and /.