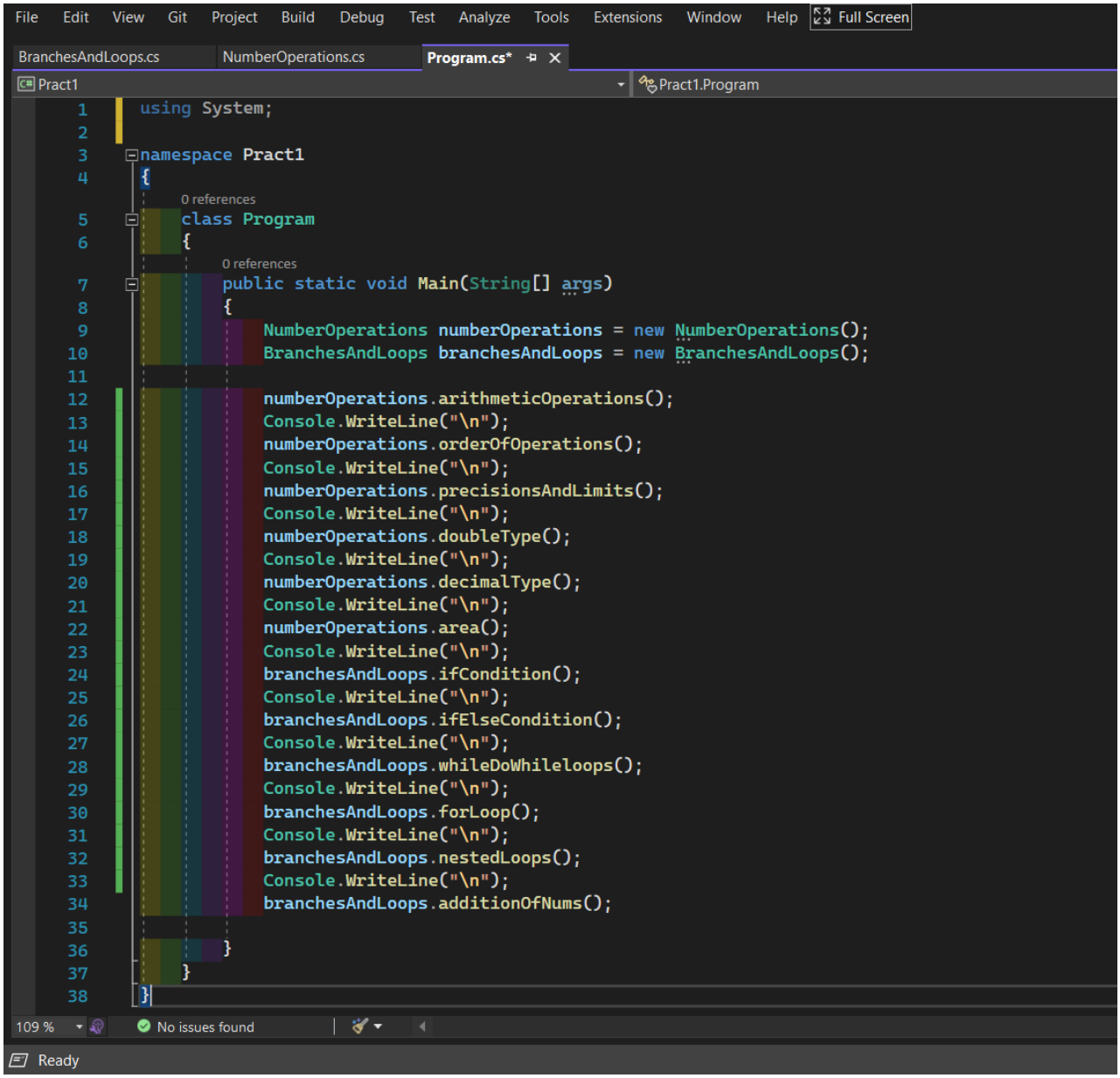
Practical – 2

C# Numbers and Branches & Loops

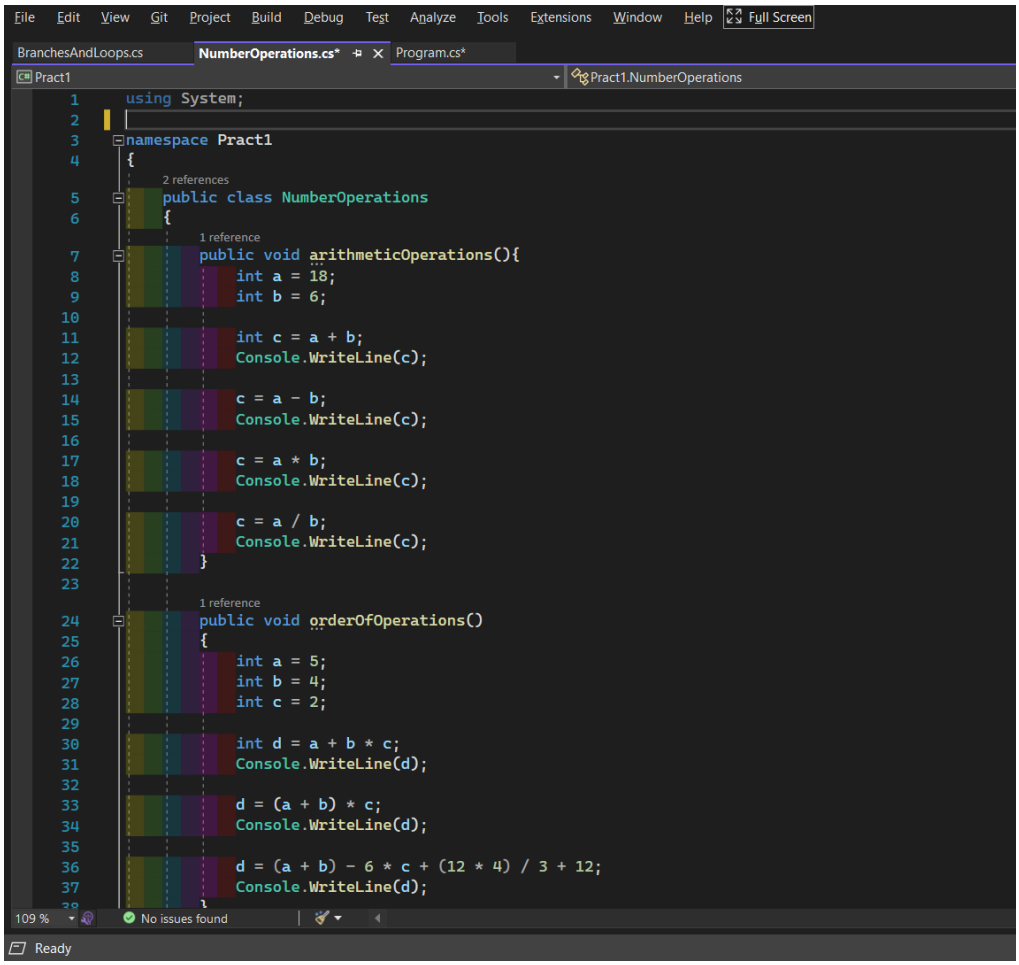
Github Repo: Github

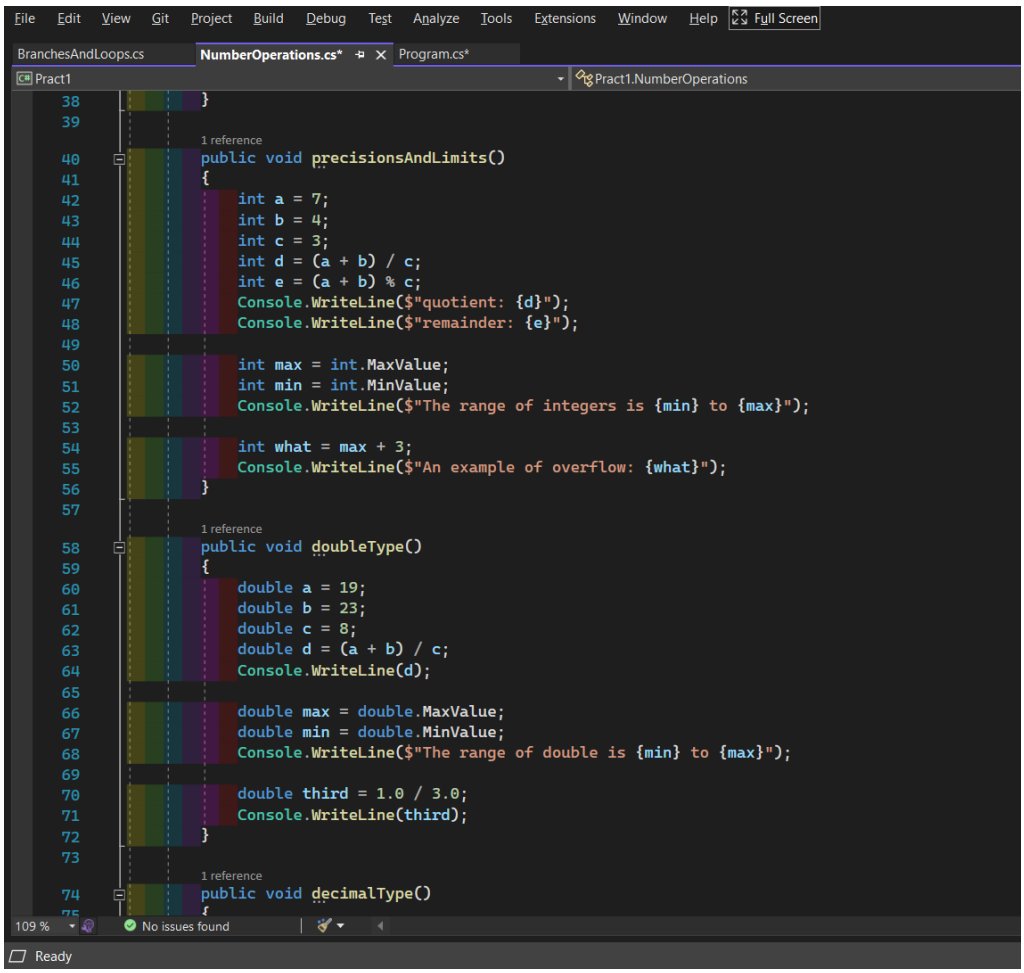
Code:

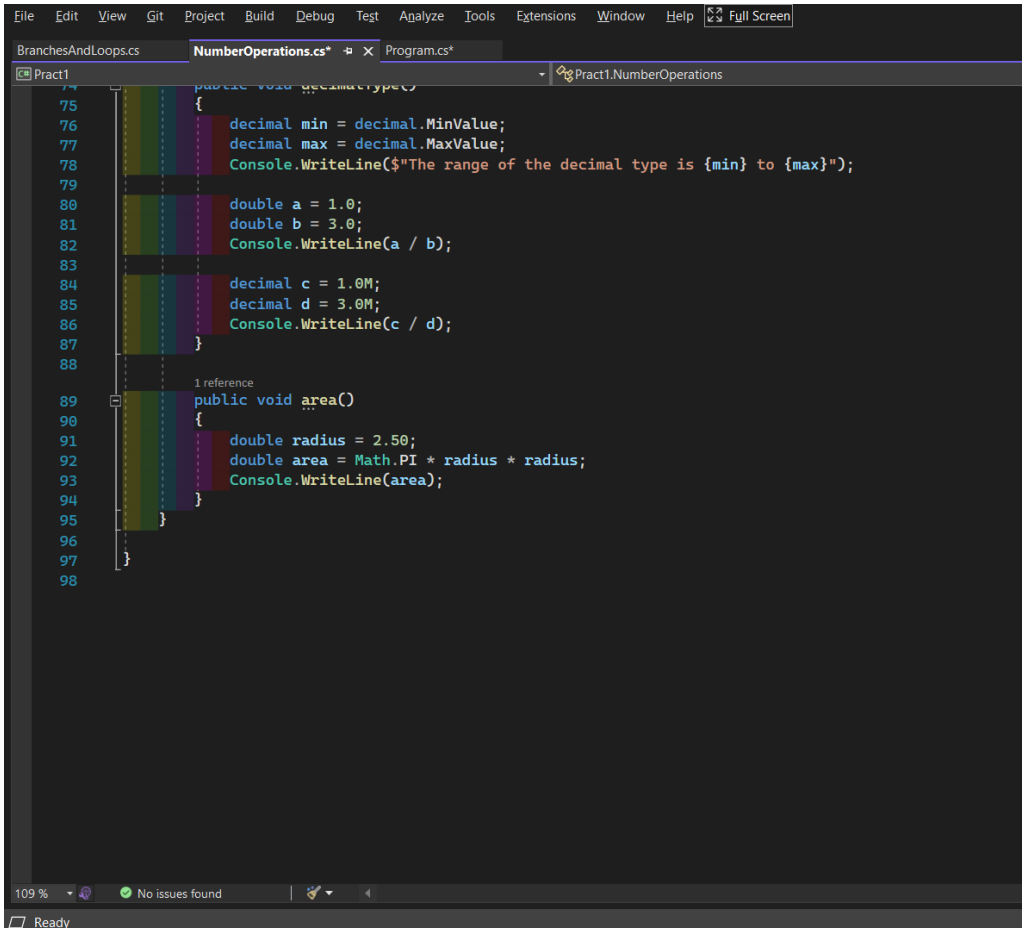
1. Program.cs



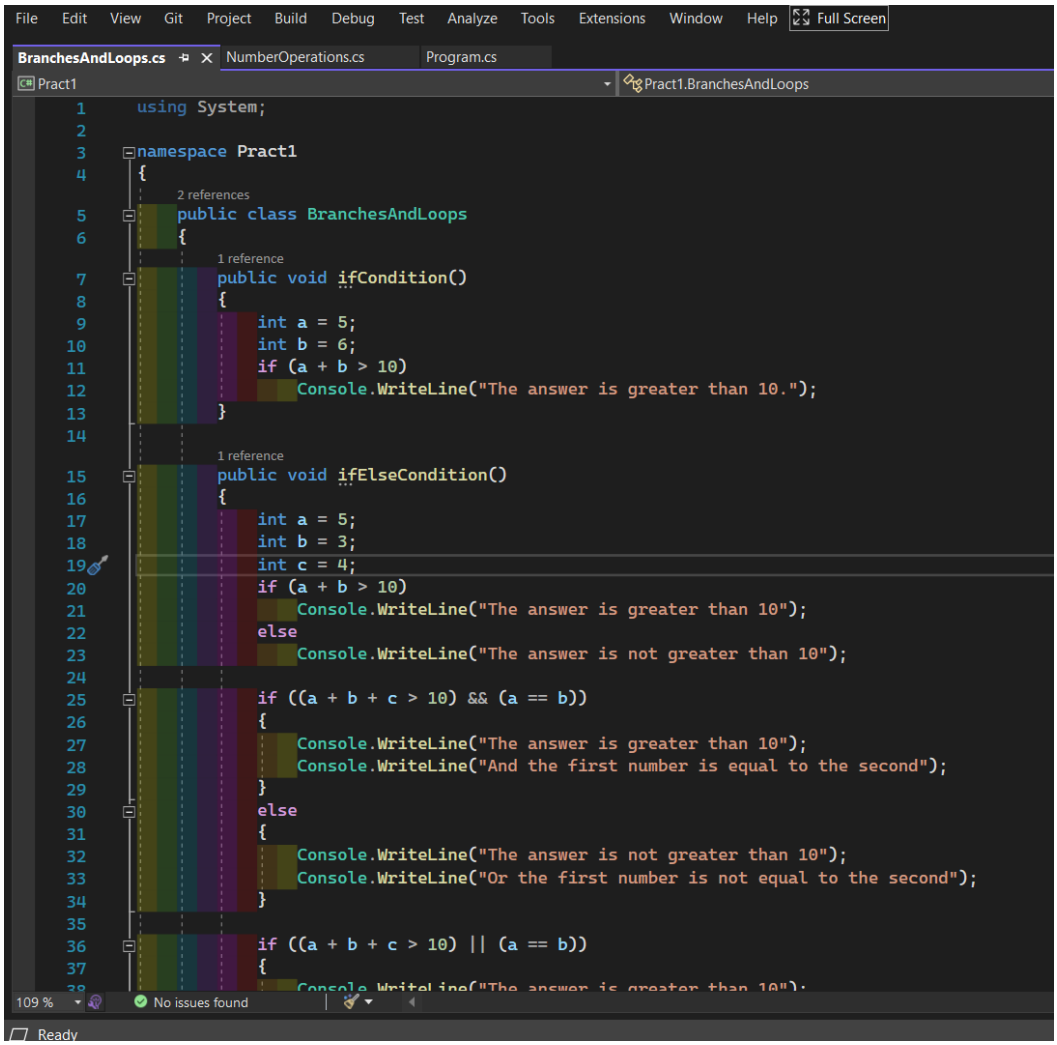
2. NumberOperations.cs

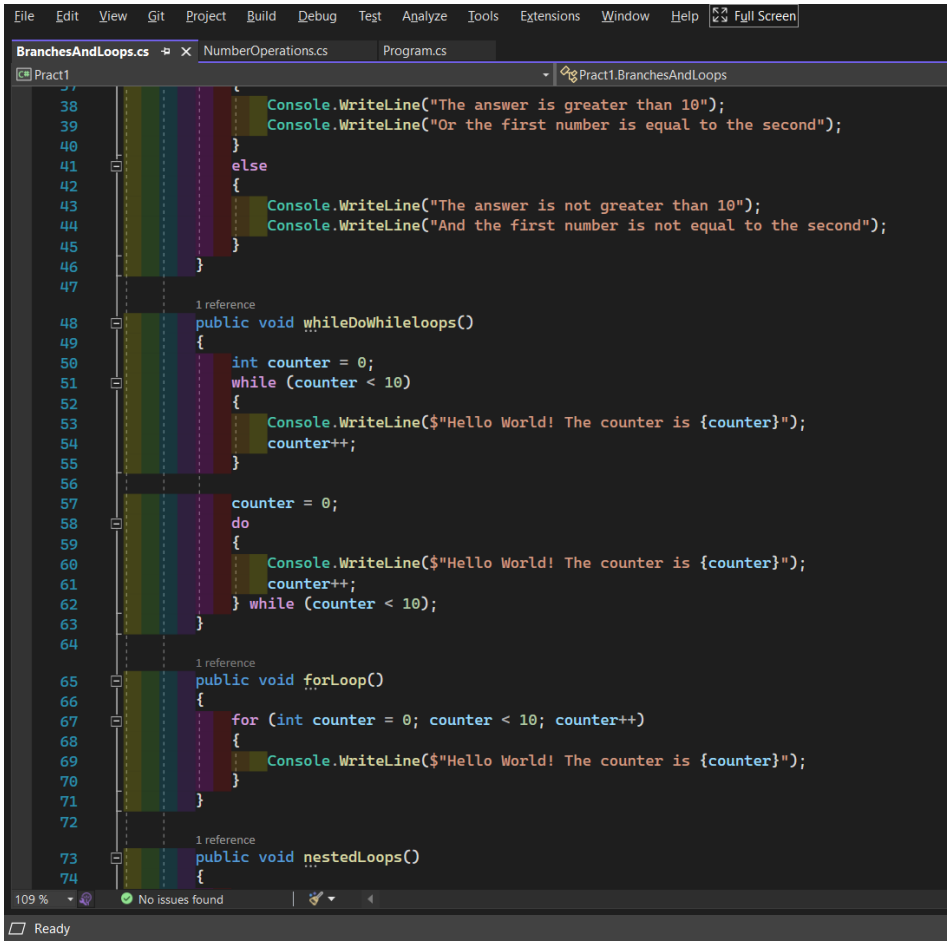


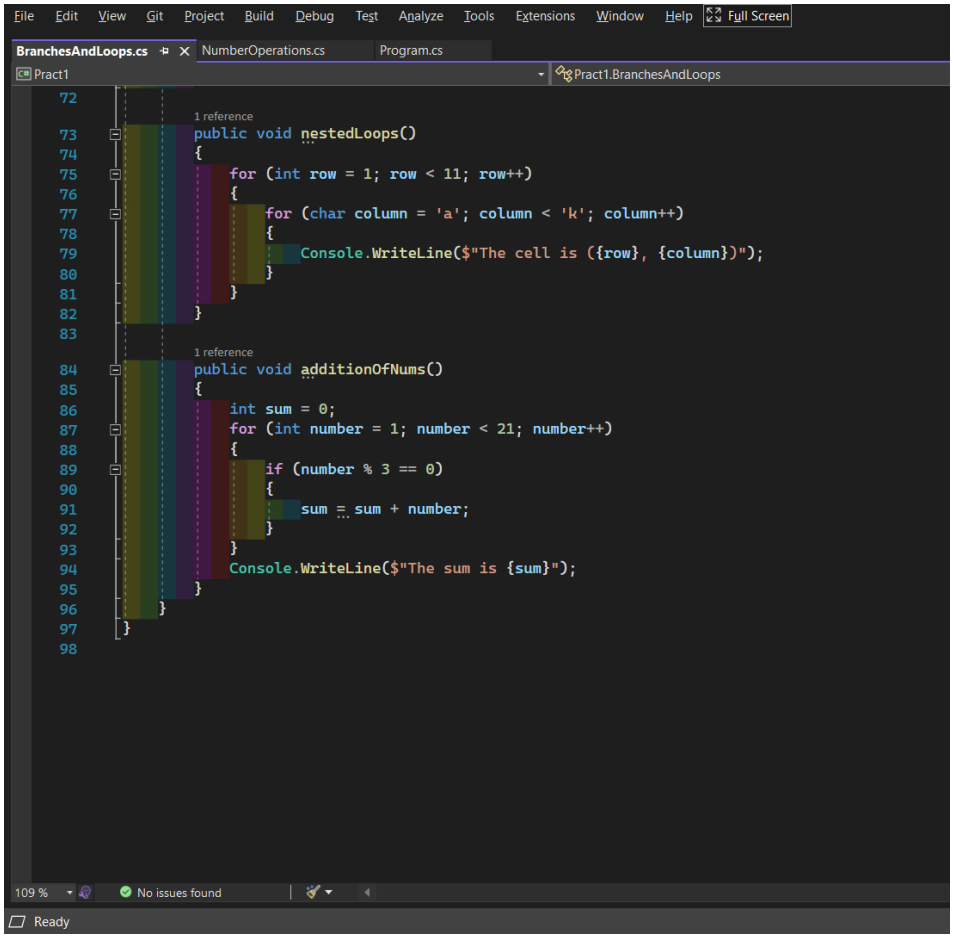

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Full Screen
BranchesAndLoops.cs
NumberOperations.cs*
Program.cs*
Pract1
Pract1.NumberOperations
}
1 reference
public void precisionsAndLimits()
{
int a = 7;
int b = 4;
int c = 3;
int d = (a + b) / c;
int e = (a + b) % c;
Console.WriteLine($"quotient: {d}");
Console.WriteLine($"remainder: {e}");
int max = int.MaxValue;
int min = int.MinValue;
Console.WriteLine($"The range of integers is {min} to {max}");
int what = max + 3;
Console.WriteLine($"An example of overflow: {what}");
}
1 reference
public void doubleType()
{
double a = 19;
double b = 23;
double c = 8;
double d = (a + b) / c;
Console.WriteLine(d);
double max = double.MaxValue;
double min = double.MinValue;
Console.WriteLine($"The range of double is {min} to {max}");
double third = 1.0 / 3.0;
Console.WriteLine(third);
}
1 reference
public void decimalType()
109 %
No issues found
Ready


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Full Screen
BranchesAndLoops.cs
NumberOperations.cs*
Program.cs*
Pract1
Pract1.NumberOperations
{
decimal min = decimal.MinValue;
decimal max = decimal.MaxValue;
Console.WriteLine($"The range of the decimal type is {min} to {max}");
double a = 1.0;
double b = 3.0;
Console.WriteLine(a / b);
decimal c = 1.0M;
decimal d = 3.0M;
Console.WriteLine(c / d);
}
1 reference
public void area()
{
double radius = 2.50;
double area = Math.PI * radius * radius;
Console.WriteLine(area);
}
}
}
109 %
No issues found
Ready

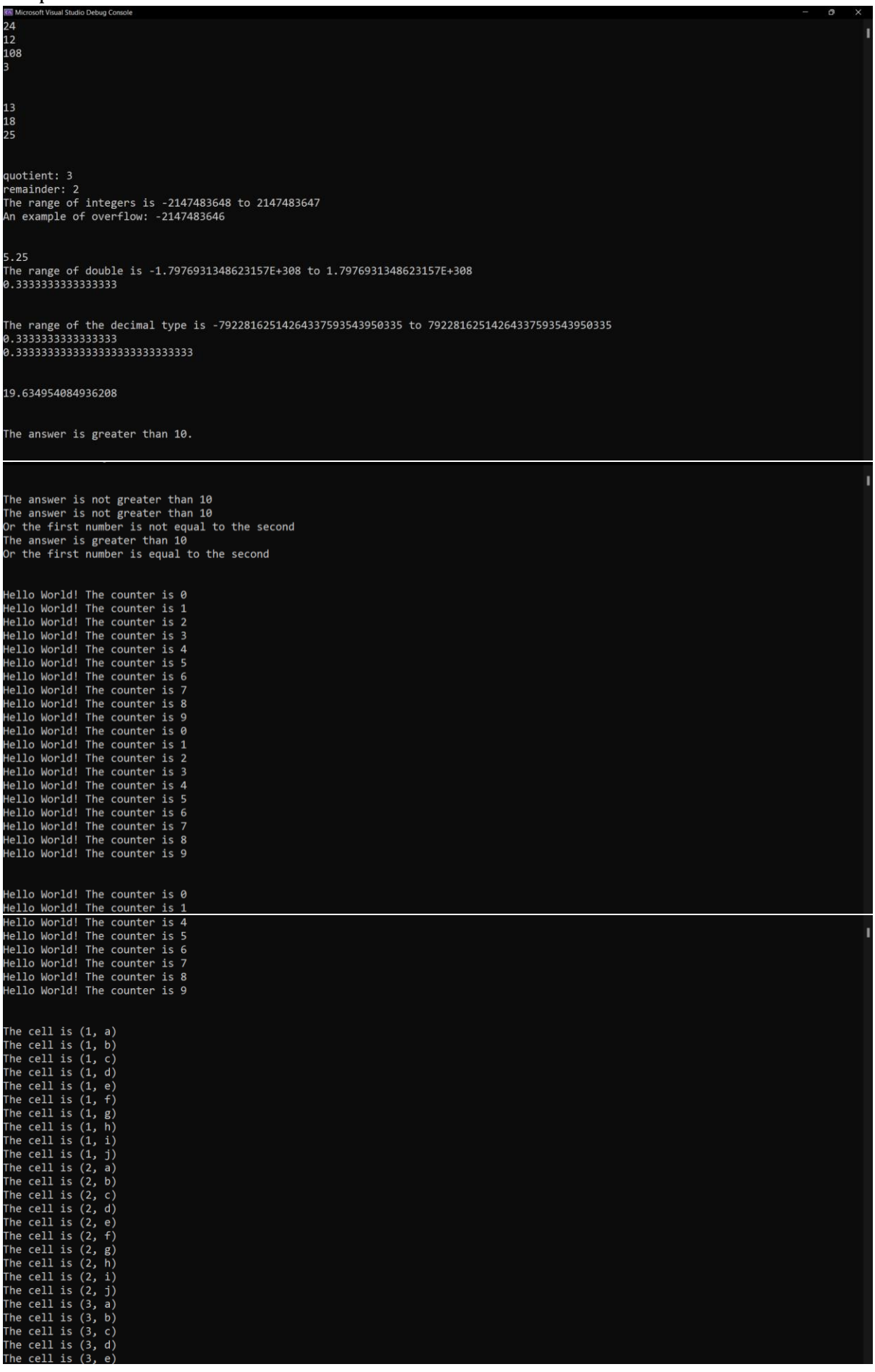
3. BranchesAndLoops.cs




File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Full Screen
BranchesAndLoops.cs
NumberOperations.cs
Program.cs
Pract1
Pract1.BranchesAndLoops
Console.WriteLine("The answer is greater than 10");
Console.WriteLine("Or the first number is equal to the second");
}
else
{
Console.WriteLine("The answer is not greater than 10");
Console.WriteLine("And the first number is not equal to the second");
}
}
1 reference
public void whileDoWhileloops()
{
int counter = 0;
while (counter < 10)
{
Console.WriteLine($"Hello World! The counter is {counter}");
counter++;
}
counter = 0;
do
{
Console.WriteLine($"Hello World! The counter is {counter}");
counter++;
} while (counter < 10);
}
1 reference
public void forLoop()
{
for (int counter = 0; counter < 10; counter++)
{
Console.WriteLine($"Hello World! The counter is {counter}");
}
}
1 reference
public void nestedLoops()
{
109 %
No issues found
Ready


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Full Screen
BranchesAndLoops.cs
NumberOperations.cs
Program.cs
Pract1
Pract1.BranchesAndLoops
1 reference
public void nestedLoops()
{
for (int row = 1; row < 11; row++)
{
for (char column = 'a'; column < 'k'; column++)
{
Console.WriteLine($"The cell is ({row}, {column})");
}
}
}
1 reference
public void additionOfNums()
{
int sum = 0;
for (int number = 1; number < 21; number++)
{
if (number % 3 == 0)
{
sum = sum + number;
}
}
Console.WriteLine($"The sum is {sum}");
}
}
}
109 %
No issues found
Ready

Output:


Microsoft Visual Studio Debug Console
24
12
108
3
13
18
25
quotient: 3
remainder: 2
The range of integers is -2147483648 to 2147483647
An example of overflow: -2147483646
5.25
The range of double is -1.7976931348623157E+308 to 1.7976931348623157E+308
0.3333333333333333
The range of the decimal type is -79228162514264337593543950335 to 79228162514264337593543950335
0.3333333333333333
0.3333333333333333333333333333
19.634954084936208
The answer is greater than 10.
The answer is not greater than 10
The answer is not greater than 10
Or the first number is not equal to the second
The answer is greater than 10
Or the first number is equal to the second
Hello World! The counter is 0
Hello World! The counter is 1
Hello World! The counter is 2
Hello World! The counter is 3
Hello World! The counter is 4
Hello World! The counter is 5
Hello World! The counter is 6
Hello World! The counter is 7
Hello World! The counter is 8
Hello World! The counter is 9
Hello World! The counter is 0
Hello World! The counter is 1
Hello World! The counter is 2
Hello World! The counter is 3
Hello World! The counter is 4
Hello World! The counter is 5
Hello World! The counter is 6
Hello World! The counter is 7
Hello World! The counter is 8
Hello World! The counter is 9
Hello World! The counter is 0
Hello World! The counter is 1
Hello World! The counter is 4
Hello World! The counter is 5
Hello World! The counter is 6
Hello World! The counter is 7
Hello World! The counter is 8
Hello World! The counter is 9
The cell is (1, a)
The cell is (1, b)
The cell is (1, c)
The cell is (1, d)
The cell is (1, e)
The cell is (1, f)
The cell is (1, g)
The cell is (1, h)
The cell is (1, i)
The cell is (1, j)
The cell is (2, a)
The cell is (2, b)
The cell is (2, c)
The cell is (2, d)
The cell is (2, e)
The cell is (2, f)
The cell is (2, g)
The cell is (2, h)
The cell is (2, i)
The cell is (2, j)
The cell is (3, a)
The cell is (3, b)
The cell is (3, c)
The cell is (3, d)
The cell is (3, e)

```
The cell is (3, f)
The cell is (3, g)
The cell is (3, h)
The cell is (3, i)
The cell is (3, j)
The cell is (4, a)
The cell is (4, b)
The cell is (4, c)
The cell is (4, d)
The cell is (4, e)
The cell is (4, f)
The cell is (4, g)
The cell is (4, h)
The cell is (4, i)
The cell is (4, j)
The cell is (5, a)
The cell is (5, b)
The cell is (5, c)
The cell is (5, d)
The cell is (5, e)
The cell is (5, f)
The cell is (5, g)
The cell is (5, h)
The cell is (5, i)
The cell is (5, j)
The cell is (6, a)
The cell is (6, b)
The cell is (6, c)
The cell is (6, d)
The cell is (6, e)
The cell is (6, f)
The cell is (6, g)
The cell is (6, h)
```

```
The cell is (6, i)
The cell is (6, j)
The cell is (7, a)
The cell is (7, b)
The cell is (7, c)
The cell is (7, d)
The cell is (7, e)
The cell is (7, f)
The cell is (7, g)
The cell is (7, h)
The cell is (7, i)
The cell is (7, j)
The cell is (8, a)
The cell is (8, b)
The cell is (8, c)
The cell is (8, d)
The cell is (8, e)
```

```
The cell is (8, f)
The cell is (8, g)
The cell is (8, h)
The cell is (8, i)
The cell is (8, j)
The cell is (9, a)
The cell is (9, b)
The cell is (9, c)
The cell is (9, d)
The cell is (9, e)
The cell is (9, f)
The cell is (9, g)
The cell is (9, h)
The cell is (9, i)
The cell is (9, j)
The cell is (10, a)
The cell is (10, b)
The cell is (10, c)
The cell is (10, d)
The cell is (10, e)
The cell is (10, f)
The cell is (10, g)
The cell is (10, h)
The cell is (10, i)
The cell is (10, j)


The sum is 63
```