Using Python as a calculator

Open the Python Shell by starting IDLE. Then, use the shell to compute the results of the following calculations. Note down the results on this exercise sheet.

Formula	Python Code	Result
1234 plus 4567 = ?	`1234 + 4567`	5801
1234 divided by 23 = ?	`1234 / 23`	53.65217391304348
1234 times 2 = ?	`1234 * 2`	2468

The modulo operator

Let's assume there are 7 apples and 3 students who want to share the apples. Each of the students wants to have as many apples as possible, but they have a strong feeling of fairness and want to have the same number of apples each. They want to give the remaining apples to their Python tutor. That would be 7 modulo 3 = 1 apple for the tutor.

The modulo operation computes the *remainder* of a division. Consider dividing 7 by 3. The result of the *integer division* is 2 in this case (3 fits 2 times into 7), and the result of the modulo operation is 1.

Try to compute the following calculations manually before checking the results using the Python Shell.

Formula	Python Code	Result
17 modulo 5 = ?	`17 % 5`	2
26 modulo 3 = ?	`26 % 3`	2
1288 modulo 2 = ?	`1288%2`	0

A simple calculator

In this exercise, we will write a simple calculator that simultaneously outputs the results of the division and the modulo operation. Create a file named *myCalculator.py* using IDLE. If you start your program using F5, the following should happen:

```
Please enter the dividend (needs to be an integer):
8
Please enter the divisor (needs to be an integer):
3
Result of the division operation:2.6666666666666665
Result of the modulo operation:  2
```

Hints:

1. `print("something")` prints `something`
2. `print("something", "else")` prints `something else`
3. `input()` reads input entered by the user; the result of this function call is a *string*
4. Alternatively, you can also use `input("something")` instead of using `print("something")` and `input()`.