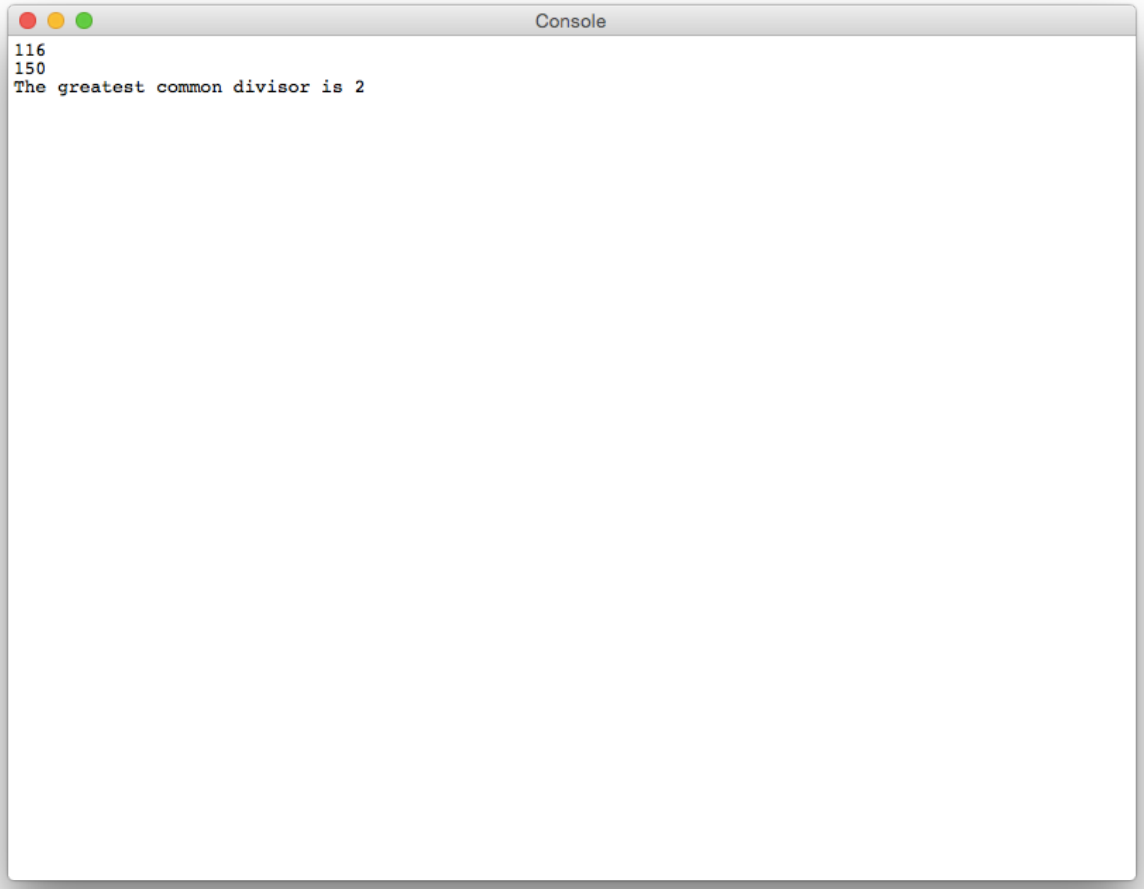
Test Data

Online calculator used for proofs: http://www.mathportal.org/calculators/numbers-calculators/gcd-lcm-calculator.php

Example 1: 116 and 150



Proof:

Result

Greatest Common Divisor (GCD) for **116 150** is **2**

Explanation

The Greatest Common Divisor **(GCD)**, also known as the Greatest Common Factor **(GCF)**, or Highest Common Factor **(HCF)**, of two or more non-zero integers, is the largest positive integer that divides the numbers without a remainder.

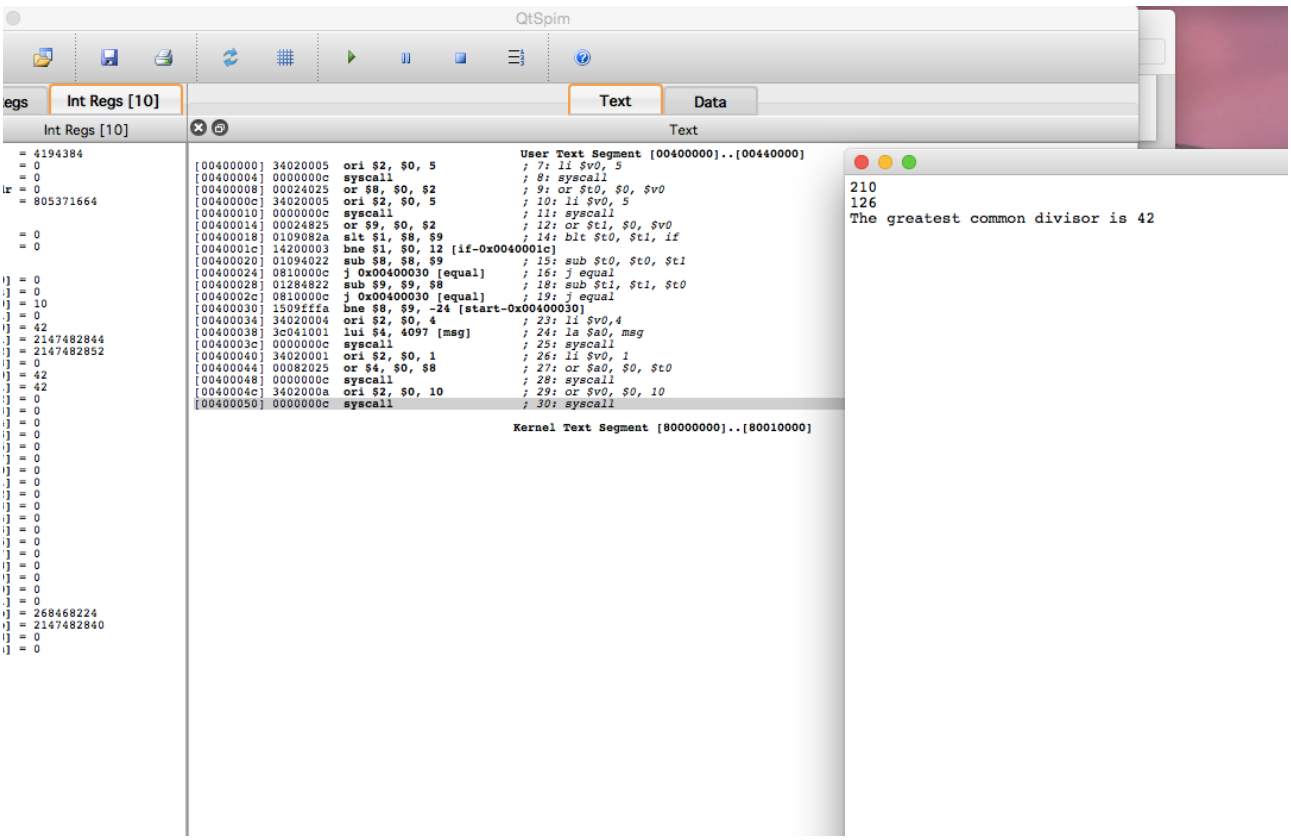
In this example:

Factors of 116 are 1 , 2 , 4 , 29 , 58 , 116.

Factors of 150 are 1 , 2 , 3 , 5 , 6 , 10 , 15 , 25 , 30 , 50 , 75 , 150.

We see that the Greatest Common Factor(Divisor) is **2**

Example 2: 210 and 126



Proof:

Result

Greatest Common Divisor (GCD) for **210 126** is **42**

Explanation

The Greatest Common Divisor **(GCD)**, also known as the Greatest Common Factor **(GCF)**, or Highest Common Factor **(HCF)**, of two or more non-zero integers, is the largest positive integer that divides the numbers without a remainder.

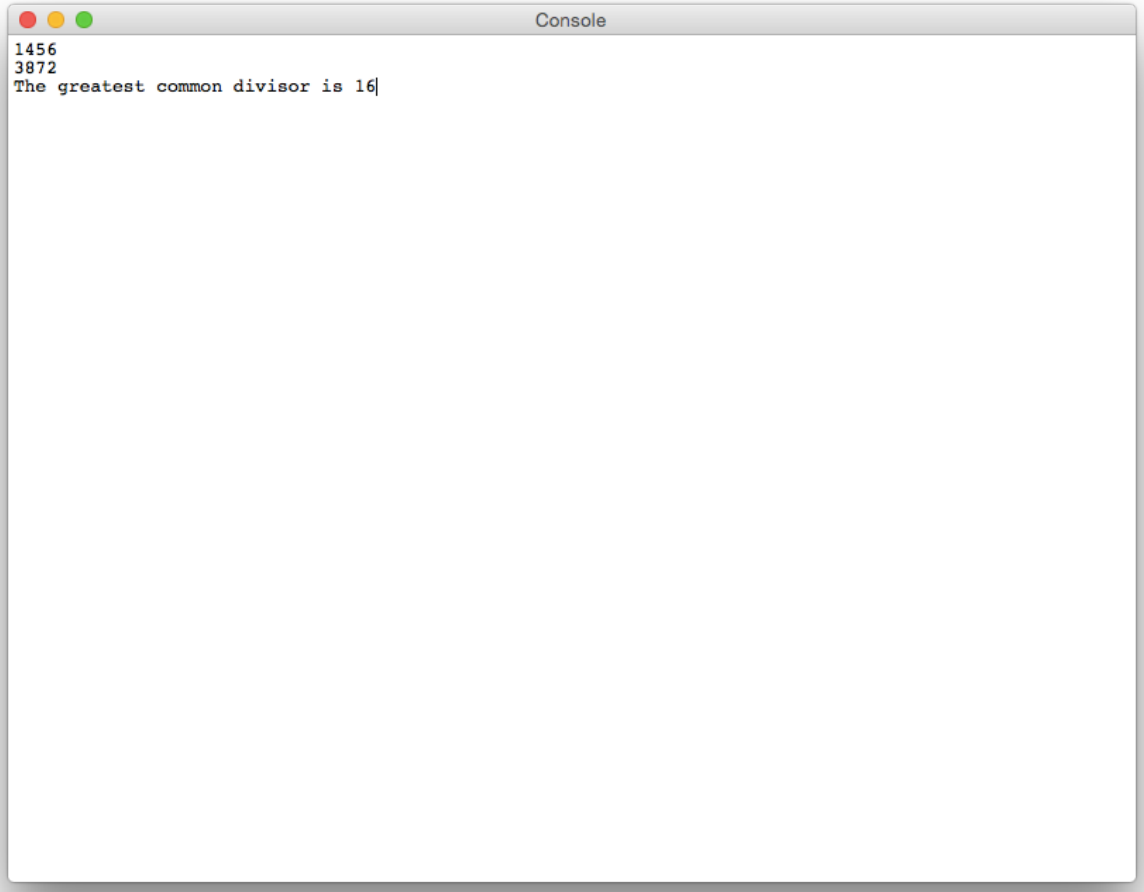
In this example:

Factors of 210 are 1 , 2 , 3 , 5 , 6 , 7 , 10 , 14 , 15 , 21 , 30 , 35 , 42 , 70 , 105 , 210.

Factors of 126 are 1 , 2 , 3 , 6 , 7 , 9 , 14 , 18 , 21 , 42 , 63 , 126.

We see that the Greatest Common Factor(Divisor) is **42**

Example 3: 1456 and 3872



Proof:

Result

Greatest Common Divisor (GCD) for **1456 3872** is **16**

Explanation

The Greatest Common Divisor **(GCD)**, also known as the Greatest Common Factor **(GCF)**, or Highest Common Factor **(HCF)**, of two or more non-zero integers, is the largest positive integer that divides the numbers without a remainder.

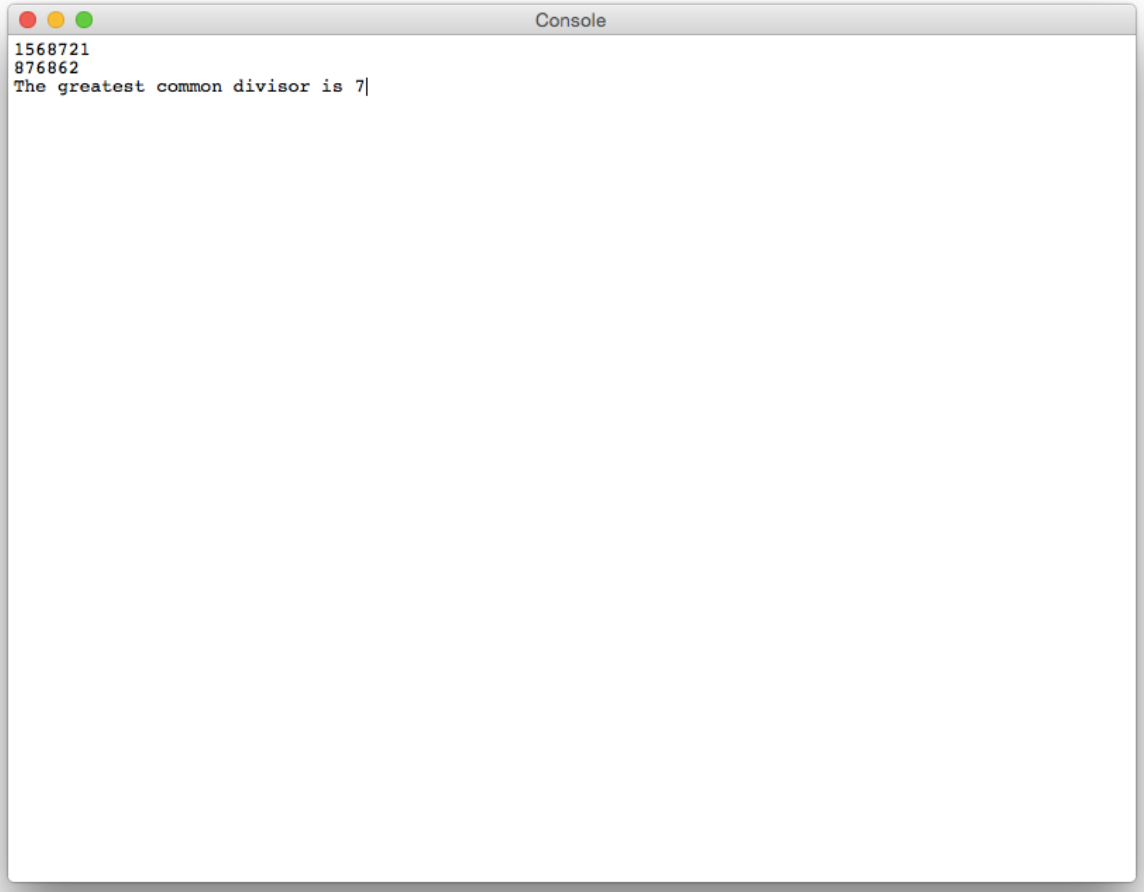
In this example:

Factors of 1456 are 1 , 2 , 4 , 7 , 8 , 13 , 14 , 16 , 26 , 28 , 52 , 56 , 91 , 104 , 112 , 182 , 208 , 364 , 728 , 1456.

Factors of 3872 are 1 , 2 , 4 , 8 , 11 , 16 , 22 , 32 , 44 , 88 , 121 , 176 , 242 , 352 , 484 , 968 , 1936 , 3872.

We see that the Greatest Common Factor(Divisor) is **16**

Example 4: 1568721 and 876862



Proof:

Result

Greatest Common Divisor (GCD) for **1568721 876862** is **7**

Explanation

The Greatest Common Divisor **(GCD),** also known as the Greatest Common Factor **(GCF),** or Highest Common Factor **(HCF),** of two or more non-zero integers, is the largest positive integer that divides the numbers without a remainder.

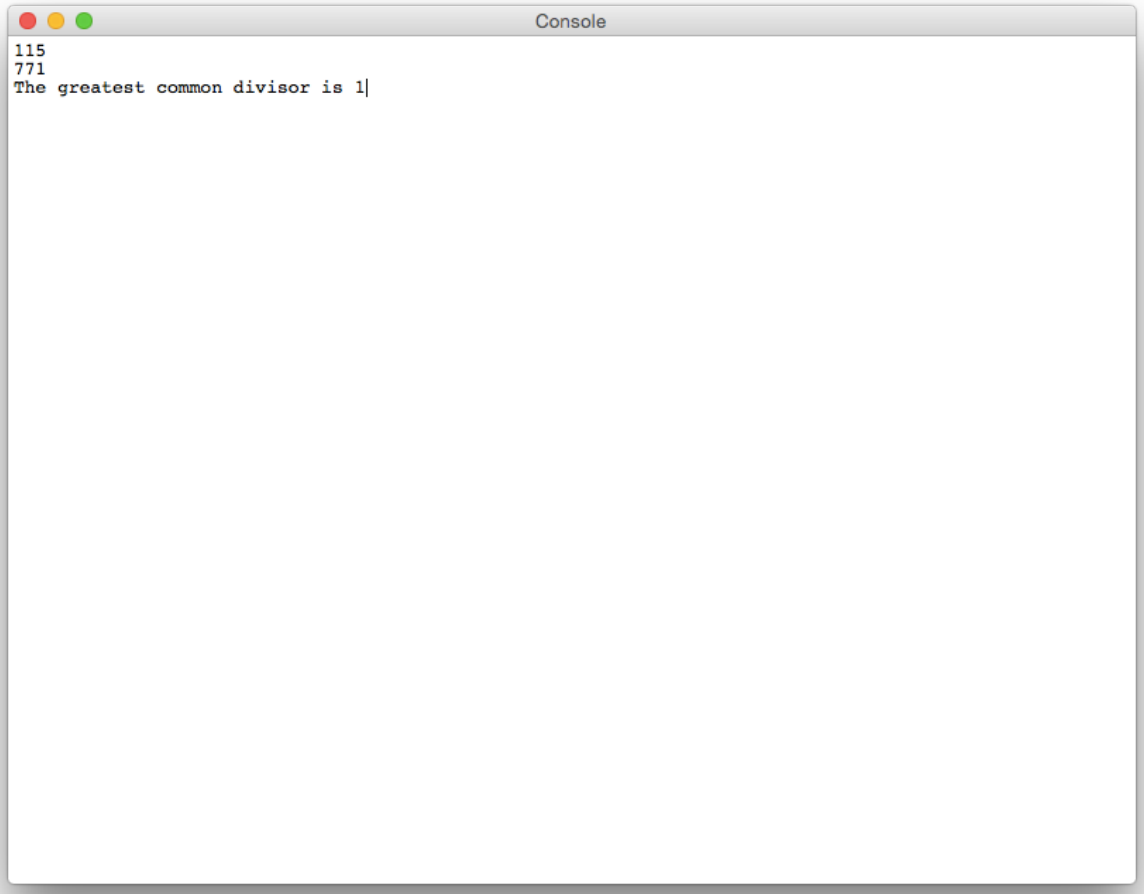
In this example:

Factors of 1568721 are 1 , 3 , 7 , 11 , 21 , 33 , 77 , 231 , 6791 , 20373 , 47537 , 74701 , 142611 , 224103 , 522907 , 1568721.

Factors of 876862 are 1 , 2 , 7 , 14 , 62633 , 125266 , 438431 , 876862.

We see that the Greatest Common Factor(Divisor) is **7**

Example 5: 115 and 771



Proof:

Result

Greatest Common Divisor (GCD) for **115 771** is **1**

Explanation

The Greatest Common Divisor **(GCD)**, also known as the Greatest Common Factor **(GCF)**, or Highest Common Factor **(HCF)**, of two or more non-zero integers, is the largest positive integer that divides the numbers without a remainder.

In this example:

Factors of 115 are 1 , 5 , 23 , 115.

Factors of 771 are 1 , 3 , 257 , 771.

We see that the Greatest Common Factor(Divisor) is **1**