

The Euclidean algorithm, or Euclid's algorithm, is an efficient method for computing the greatest common divisor (GCD) of two numbers, the largest number that divides both of them without leaving a remainder (see listing 1).

```
1 // Euclid's algorithm
2 // Input:
3 // a - integer positive number
4 // b - integer positive number
5 // Output:
6 // The greatest common divisor (GCD) of two numbers: a and b
7
8 int algorithmEuclids(int a, int b)
9 {
10     while (b!=0)
11     {
12         if (a>b)
13             a=a-b;
14         else
15             b=b-a;
16     }
17     return a;
18 }
```

Listing 1: Euclid's algorithm implemented in C

Listings

1	Euclid's algorithm in C	1
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