

Please consider this programming problem:  
Given two positive integers A and B,  
find GCD of A and B.  
Provide an example solution for the problem in the Python language.

Vorschläge anzeigen ▾ 🔊

Python

```
def gcd(a, b):  
    """Calculates the greatest common divisor (GCD) of two positive integers.  
  
    Args:  
        a: The first positive integer.  
        b: The second positive integer.  
  
    Returns:  
        The GCD of a and b.  
    """  
  
    while b != 0:  
        a, b = b, a % b  
    return a  
  
# Example usage:  
a = 12  
b = 18  
result = gcd(a, b)  
print("GCD of", a, "and", b, "is:", result)
```

Verwende den Code [mit Vorsicht](#).

This Python code implements the Euclidean algorithm to find the GCD of two positive integers. Here's a breakdown of the code:

1. **gcd(a, b) function:** This function takes two positive integers `a` and `b` as input and returns their GCD.
2. **while b != 0: loop:** This loop continues as long as `b` is not zero.
3. **a, b = b, a % b:** This line swaps the values of `a` and `b` and calculates the remainder of `a` divided by `b`.
4. **return a:** Once the loop terminates, the value of `a` will be the GCD.
5. **Example usage:** The code demonstrates how to use the `gcd` function with the values `a = 12` and `b = 18`. The result is printed to the console.

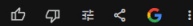
This implementation is efficient and provides a clear solution to the given problem.

Quellen und ähnliche Inhalte ^ ⓘ

github.com

"

github.com



Prompt hier eingeben



Gemini zeigt möglicherweise fehlerhafte Informationen an, z. B. zu Personen. Überprüfe daher die Antworten. [Datenschutz & Gemini-Apps](#)