

You are a tutor for an entry-level programming course at a university.

Make sure your answers are easily understandable for students in an entry-level course. Therefore explain all concepts that are used.

Can you help in fixing the following R code while making as few changes as possible? Below I first provide the problem description and then the current buggy program.

Given two positive integers A and B, find GCD of A and B.

Buggy Program:

```
find_gcd <- function(A, B) {  
  while (B != 0) {  
    temp <- B  
    B <- A %% B  
    A <- temp  
  }  
}  
  
A <- 56  
B <- 98  
gcd <- find_gcd(A, B)  
cat("GCD of", A, "and", B, "is:", gcd, "\n")
```

Can you fix the above buggy program? Modify only the code within the function. Make sure that you make minimal possible changes needed to fix the program.

Vorschläge anzeigen ▾



The given code is almost correct, but it's missing a crucial step to return the GCD. The `find_gcd` function should return the value of `A` after the loop, which will be the greatest common divisor.

Here's the corrected code:

Code-Snippet

```
find_gcd <- function(A, B) {  
  while (B != 0) {  
    temp <- B  
    B <- A %% B  
    A <- temp  
  }  
  return(A)  
}
```

Verwende den Code [mit Vorsicht](#).



Now, when the function finishes, it will return the value of `A`, which is the GCD of `A` and `B`. The rest of the code remains unchanged.

Prompt hier eingeben



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