



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. Here's the corrected code:

#### Code-Snippet

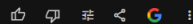
```
find_gcd <- function(A, B) {  
  while (B != 0) {  
    temp <- B  
    B <- A %% B  
    A <- temp  
  }  
  return(A)  
}
```

Verwende den Code [mit Vorsicht](#).



The only change made is the addition of the `return(A)` statement at the end of the function. This line is necessary to return the calculated GCD value, which is stored in the `A` variable after the loop terminates.

Now, when you run the code with the corrected function, it will correctly output the GCD of 56 and 98, which is 14.



Prompt hier eingeben

