

Copilot

Sure, I'd be happy to help! Let's go through the code step by step and identify the issues.

1. **Comparison Operator:** In the line `if (fib = number)`, the single `=` is used for assignment, not comparison. We need to use `==` for comparison.
2. **Fibonacci Calculation:** The Fibonacci sequence calculation is incorrect. We need to update `f2` before updating `f1`.

Here's the corrected code with minimal changes:

```
fibonacci_index <- function(number) {  
  if (number < 0) {  
    stop("Keine gültige Fibonacci-Zahl")  
  }  
  
  index <- 1  
  fib <- 1  
  f1 <- 1  
  f2 <- 0  
  
  while (fib <= number) {  
    if (fib == number) {  
      return(index)  
    }  
    f2 <- f1  
    f1 <- fib  
    fib <- f1 + f2  
    index <- index + 1  
  }  
  
  stop("Keine gültige Fibonacci-Zahl")  
}
```

Explanation:

1. **Comparison Operator:** Changed `if (fib = number)` to `if (fib == number)` to correctly compare `fib` and `number`.
2. **Fibonacci Calculation:** Updated the Fibonacci sequence calculation to correctly update `f2` before `f1`.

This should fix the issues in your program. Let me know if you have any questions or need further assistance!