

## 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 `=` operator is used for assignment, not comparison. We should use `==` for comparison.
2. **Fibonacci Calculation:** The Fibonacci sequence calculation is incorrect. The values of `f1` and `f2` need to be updated correctly.

Here's the corrected version of the function 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)  
    }  
    fib <- f1 + f2  
    f2 <- f1  
    f1 <- fib  
    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 `f1` and `f2`.

Now, the function should work as expected. You can test it with different values of `number` to ensure it behaves correctly. If you have any more questions or need further clarification, feel free to ask!