

Copilot

Sure, I can help with that! 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. The values of `f1` and `f2` are not updated correctly.

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)
    }
    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 calculation to correctly update `f1` and `f2`.

Now, the function should work correctly and return the index of the Fibonacci number if it exists in the series up to `number`. If `number` is not a Fibonacci number, it will stop with an error message.

Feel free to ask if you have any more questions or need further clarification!