

Copilot

Sure, I can help with that! Let's make the minimal changes needed to fix the program. Here is the corrected version of the function:

```
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) { # Change '=' to '=='  
      return(index)  
    }  
    f1 <- fib  
    fib <- f1 + f2  
    f2 <- f1 - f2 # Correct the update of f2  
    index <- index + 1  
  }  
  
  stop("Keine gültige Fibonacci-Zahl")  
}
```

The changes made are:

1. Changed `if (fib = number)` to `if (fib == number)` to correctly compare the values.
2. Corrected the update of `f2` to `f2 <- f1 - f2` to maintain the correct Fibonacci sequence.

Try running this updated function in your program. Let me know if you need any further assistance!