

Copilot

Sure! Here's a solution for calculating the Fibonacci series up to a given number (N) in R:

```
fibonacci_series <- function(N) {  
  # Initialize the first two Fibonacci numbers  
  fib <- c(0, 1)  
  
  # Generate Fibonacci numbers until the next number exceeds N  
  while (TRUE) {  
    next_fib <- tail(fib, 1) + tail(fib, 2)[1]  
    if (next_fib > N) {  
      break  
    }  
    fib <- c(fib, next_fib)  
  }  
  
  # Include N if it is part of the series  
  if (N %in% fib) {  
    return(fib)  
  } else {  
    return(fib[fib <= N])  
  }  
}  
  
# Example usage  
N <- 21  
fibonacci_series(N)
```

This function initializes the first two Fibonacci numbers and then generates subsequent numbers until the next number exceeds (N). If (N) is part of the series, it includes (N) in the result. Otherwise, it returns the series up to the largest number less than (N).

Feel free to test it out with different values of (N)! If you have any questions or need further assistance, just let me know.