

Copilot

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

```
fibonacci_series <- function(N) {  
  if (N <= 0) {  
    return(NULL)  
  }  
  
  fib <- c(0, 1)  
  while (TRUE) {  
    next_fib <- tail(fib, 1) + tail(fib, 2)[1]  
    if (next_fib > N) {  
      break  
    }  
    fib <- c(fib, next_fib)  
  }  
  
  if (N %in% fib) {  
    return(fib)  
  } else {  
    return(fib[fib <= N])  
  }  
}
```

Example usage:

```
N <- 21  
fibonacci_series(N)
```

This function first initializes the Fibonacci series with the first two numbers, 0 and 1. It then calculates the next Fibonacci number and appends it to the series until the next number exceeds (N). Finally, it checks if (N) is part of the series and returns the appropriate sequence.

Feel free to try it out and let me know if you have any questions!