

## Copilot

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

```
# Function to generate Fibonacci series up to N
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)
  }

  # Return the Fibonacci series
  return(fib)
}

# Example usage
N <- 21
result <- fibonacci_series(N)
print(result)
```

In this example, the function `fibonacci_series` generates the Fibonacci series up to the given number ( N ). If ( N ) is part of the series, it will be included in the output. For ( N = 21 ), the output will be:

```
[1] 0 1 1 2 3 5 8 13 21
```

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