Question1: Suppose, you are an investor and wanted to invest your money into stock market. Instead of investing your entire corpus at once, you decided to invest according to specific strategy. Strategy is given as follows:

Strategy: Buy one share, if stock price falls for 3 consecutive days. Also buy one shares for every fall after 3 consecutive falls in price. (You can assume there is no money constraint).
Example.

Day	Closing Price	Changes in Price	Consecutive Failure	Buy
1	100		-	
2	95	-5	1	
3	94	-1	2	
4	93	-1	3	1 share @93
5	91	-2	4	1 share @91
6	93	2	-	
7	95	2	-	

Requirement:

1. Calculate total number of shares bought, total investment, total profit and total return (without time value of money) at the end of the period.
2. What if, total number of shares bought in part (1) is bought at the beginning of the period and hold till end of the period. Calculate total investment, total profit, and total return.

(only consider closing price to buy and sell share) (12 Marks)

Question2: Fibonacci sequence is very special sequence in mathematics, in which first two terms are 1, and nth term is sum of last two terms, i.e.

$$S(n) = S(n-1) + S(n-2) \quad \text{for } n > 2$$

Fibonacci Sequence: 1, 1, 2, 3, 5, 8, 13, 21, 34, ...
Write a function that return nth term of Fibonacci series. Your function should not use any object created outside the body of function. Also ensure that your function produce right result by comparing first 5 values already given in the question.

```
Fib <- function(n) {
#body of function
}
```
(5) Marks)

Further: Ensure that your function has check for 'n'. 'n' should be only positive integer. (3)

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