Problems (Self-study)

1. Write down a function *average.m* that accepts the values of a, b, c as inputs and returns the value of the average of them as an output.
2. Write down a function *positive_average.m* that takes as an input a list of *n* integer numbers and gives as an output the average of positive integers in the list.
3. Write down a function *product.m* that takes as an input a list of *n* integer numbers and gives as an output the product of all nonzero integers in the list.

Consider the function defined recursively by: $f(n) = \begin{cases} 2 & \text{if } n = 1 \\ \sqrt{1 + f(n-1)} & \text{if } n > 1 \end{cases}$ for any positive integer *n*. Write down a function *myfunc.m* that evaluates the function *f* for a given positive integer *n*. Your function should take as an input the value of *n* a