PHYSICAL MODELING IN MATLAB

EXERCISE 3.6

Write a script, called *fib_plot*, that loops i through a range from 1 to 20, uses *fibonacci2b* to compute Fibonacci numbers, and plots F_i for each i with a series of red circles.

The MATLAB script *fib_plot* contains:

```
% Exercise 3.6 - script fib_plot
%
% This script will loop through a range from 1 to 20 and will use
% the previously written script, fibonacci2b, from Exercise 3.5
% to compute Fibonacci numbers and will plot each element using
% a series of red circles.
%
% plot the two initial cases, making sure to keep the figure open
plot(1,f1,'ro');
hold on;
plot(2, f2,'ro');
% loop for the remainig values
for n=3:20
    % use fibonacci2b to compute this element of the sequence
    fibonacci2b;
    % recalling that fibonacci2b sets the result in ans, add it
    % to the plot
    plot(n,ans,'ro');
end
```

To run:

```
>> % set the initial conditions
>> f1 = 1;
>> f2 = 1;
>> % call the script
>> fib_plot
```