On Wednesday we will discuss implementing Euler's method in Octave. You should work in pairs, and at least one of the people in your pair should bring a laptop. Before coming to class, please work through the following exercises on the laptop to be used.

1. Download the file `Euler.m` from the course web page. Save it in a place in Octave's path (e.g. where you have already saved `df.m` and `levelset.m`)

2. Start Octave and see if you can run this program. Type `Euler(7)` at the Octave command prompt. You should see

   ```
   octave-3.4.0:1> Euler(7)
   ans =

       2    4    6    8   10   12   14
   ```

   if you have installed `Euler.m` correctly. Right now, `Euler(N)` simply returns an array with the first `N` even integers. It's not interesting, but it's a good place to start.

3. Open the file `Euler.m` in a text editor. On Windows you can use Notepad. On the Mac you can use TextEdit, but you need to open TextEdit's "Preferences" dialog and select the "Plain text" format before you open the file. The file's contents start with some human-readable comments, and then the following Octave code

   ```
   function y=Euler(N)
     y = zeros(1,N);
     for( k=1:N )
       y(k) = 2*k;
     end
   end
   ```

   We'll discuss each line of this code on Wednesday.

   In the text editor, change the line `y(k) = 2*k` to read `y(k)=2*k-1` and then save the file.

4. At the Octave prompt, enter `Euler(7)`. The output should now give the first seven odd numbers.