PHYSICAL MODELING IN MATLAB

EXERCISE 4.1

Write a loop that computes the first n elements of the geometric sequence, $A_{i+1} = A_i/2$ with $A_1 = 1$. Notice that the math notation puts A_{i+1} on the left side of the equality. When you translate to MATLAB, you may want to shift this index.
The loop was created in a MATLAB script *geometric* which contains:

```
% Exercise 4.1 - script geometric
%
% This script will compute the first n elements of the geometric
% sequence, A(i+1) = A(i)/2, storing the results into a vector.
% n will have been previously set
%
% Initialize first term
A(1) = 1;
for i = 2:n
    % Adjusting the indices appropriately
    A(i) = A(i-1) / 2;
end
% show the vector
A
```

To run:

```
>> % set the value for n
>> n = 5;
>> % call the script
>> geometric
```

Note that the results will be contained in a vector.