Homework 7. for-loops and while-loops are not inherently different:

- The "input" of a for-loop is a variable and a vector of values. Recreate the functionality of a for-loop using a while-loop.
- The "input" of a while-loop is the condition statement. Recreate the functionality of a while-loop using a for-loop. (Hint: when using the notation for i=1:n MATLAB does not actually create the vector 1:n. Internally it simply iterates over the values in that vector by incrementing i until it reaches n. This means that if you write for i=1:281474976710655 you'll get a loop that, on its own, will "never" terminate. Explanation: 281474976710655 is the largest integer that MATLAB can represent internally. It is such a large number that even if every pass through the loop only takes I millisecond getting through the loop will take about 10000 years.)

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