HW #5, MATLAB/Programming Class
Oct 16, 2013

In this homework you will solve the problems we discussed in the last class. The objective is to think about solving a problem as a series of steps (an algorithm). If you clearly define the steps, then implementing should be straightforward. Think about the algorithms to solve the problems, then outline and implement.

1. Write function to check if two strings are the same.
2. Write a function to check if two strings are anagrams (reordered versions of each other).
3. Write a function to reverse a string.
4. Add up the squares/cubes of integers from 1 to N, N a positive integer.
5. Write a function to calculate x^N, (for any x and N a positive integer ) using multiplication.
6. Write a function for the computer to guess an integer between 1 and 100 using binary search. Make the function so that you give the number. The program should give the value of high/low at each iteration so that you don't have to at each step.

   **Optional:** Make a version of (6) where you give the computer high/low/correct feedback. The program should identify incorrect feedback by the end (if you said higher, but the number was lower).