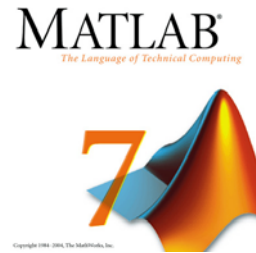# The COMP24111 Matlab Workout

If you think you're really that hot a Matlab programmer, try some of these….

---

## MATLAB AMATEUR

*Write a script to find out how many steps the Collatz Conjecture takes to converge if we start with the number 24111.*

*http://en.wikipedia.org/wiki/Collatz_conjecture*

*While doing so, try not to read this: http://xkcd.com/710/*

## MATLAB PRO

*Your COMP20010 exercise this week is to implement a Caesar Cipher. I'll bet your code was at least 50-60 lines in Java. I can do it in 2-3 lines in Matlab. Can you?*

## MATLAB NINJA

*If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23. Find the sum of all the multiples of 3 or 5 below 1000.*

## MATLAB SUPERMAN

*Write a script to generate solutions to the 8-queens puzzle.*

*http://en.wikipedia.org/wiki/Eight_queens_puzzle*