## Exploring Programming In Ruby, Practical 7 - Marc Laffan (15202421)

Q 3. List any outstanding issues in Ruby that you feel unsure about and mail them to me (mark.keane@ucd.ie or put them up in the Moodle discussion.

Hi Mark,

I have a few issues/queries with Ruby that I'd like to ask, as per Q3 for practical 7:

- 1. If Ruby doesn't allow subclasses to inherit variables, then will this cause issues when up/downcasting amongst an inheritance hierarchy tree? Casting can cause issues in languages that already allow for subclasses to inherit variables, so I am curious the lack of variable inheritance would cause other issues.
- 2. Could you expand more on data structures in Ruby? I know that there are a tonne in Java (vectors, ArrayLists, Hashmap, Stack, Queue, Dequeue, Sets, Hashtables, etc), so I'm curious to see if Ruby has any that I haven't heard of before. Even if I am very unlikely to use them at all, I'd still like to know about them.
- **3.** Could you expand more on examples of algorithms in Ruby? I do not have much experience with algorithms, but am strongly interested in learning more about how to implement effective algorithms. If I could see a working example of a depth-first algorithm with the SixDegrees application, I'd be very grateful.
- **4.** Lastly, more of a question on the popularity of Ruby. Why did it take the popularity of a framework to get Ruby off the ground? It seems like any other language out there, sans quirks that most languages have. So is there any reason for its lack of popularity before Rails came along?