

# Ruby Practical

Konstantinos Karasavvas

October 17, 2014

## 1 Basic Exercises

1. Load Ubuntu 12.04 image into VirtualBox and start it (unless you have a Linux distribution already installed or you intend to work in Windows or Mac)
  - Password for Ubuntu is: eia-2013
2. Check system's Ruby version
3. Run interactive ruby and try some commands
4. Install Ruby Version Manager (RVM) and install ruby 2
  - `$ rvm list known`
5. Make a new directory, "pdf-generator" that will represent your project
6. Create an RVM configuration (Ruby version and gem set) only for that project
7. Create a simple program that accepts a single text file as an argument and generates a pdf file from it
  - `$ to_pdf.rb text_file.txt`
  - Check [www.ruby-toolbox.com](http://www.ruby-toolbox.com)
8. Make a project to generate QR codes out of a URL
  - Check [http://en.wikipedia.org/wiki/QR\\_code](http://en.wikipedia.org/wiki/QR_code)
9. Create a project with two classes to capture books and authors and the relationships between them
  - write a driver program to test them
  - initially one to many relationship only
  - use proper variable initialization with meaningful default values
10. Create a project simulate basic file and directory commands
  - `$ basic_shell.rb <cmd> <param1> <param2> ...`
  - `optparse` library
  - see `eval`, `method_missing`, metaprogramming for more advanced implementation