COSC 251 – Programming Languages
Project 2
Spring 2008

Objective: Use Python to control a turtle.

Your Task: A turtle graphics system is a simple 2-dimensional graphics system that comprises of only 4 functions:

> Left(theta) – turn the turtle left theta degrees
> Right(theta) – turn the turtle right theta degrees
> Forward(x) – move the turtle forward x units (typically pixels)
> Pen(up/down) – pen up or down

Imagine if the turtle had a pen attached to its shell. If the pen is down and the turtle moves forward, then a line is drawn. If the pen is up, then the turtle just moves and no line is drawn. When the turtle moves left or right, assume that it stays in place in respect to the pen. For this project, you will create a very basic turtle graphics system. Assume that the turtle, when it moves left or right, it moves in 90 degree increments only. So, your left and right functions no longer have to specify a theta. You also don't need to worry about colors.

That's not all of course. Your program will be given a sequence of commands from an external file and your program should read that file then output what the graphics should look like utilizing the system. This is trickier than it may seem at first glance. I will provide an example test input file and resulting output shortly.

Deliverables: your test program source and your turtle graphics source. Keep in mind that I will be testing it using my own test input.

Expectations: The code should be clean, concise, well-commented and correct. If you use an outside source, be sure to document that source. Significant use of outside sources will result in a deduction. Grading rubric and example binary will be provided a week ahead of the due date.

DUE: March 21st, 11:59pm via Digital Dropbox