APCS :: Lab 3 – "Handoff Bot"

Due at end of class Tuesday.

Problem (From (Ch. 2, ex. 11): A robot named karel is at the origin facing North with one beeper in its bag. Three blocks east of it is another robot named carl, facing easy with no beepers. There are no wall sections (except for the western and southern boundaries) or beepers in the world. Have karel walk to carl and give carl the beeper. Carl should then carry the beeper twp blocks north and put it down. Both robots should then return to their original locations, facing the original directions.

Optional exercises (not due, but recommended):

1. To have other objects in the world, you need to load a karel world file – a simple text file that describes the locations of walls and beepers. To load a file into your program you must first copy the file into your project folder. Download lab3.kwld from the "handouts" section of the website and copy it into the project folder of the program you happen to be working in. Then, in your code, just before the line where you set the world to be visible type: the following:

   ```
   World.readWorld("Lab3.kwld");
   ```

   Then compile and run your program. You should see a world with some walls in it. This is the setup for Ch. 2, ex. 8. You may write the program if you like.

2. Think about Ch. 2, ex. 10, in particular the question: "How many different programs can we write to do this?" What's the answer?