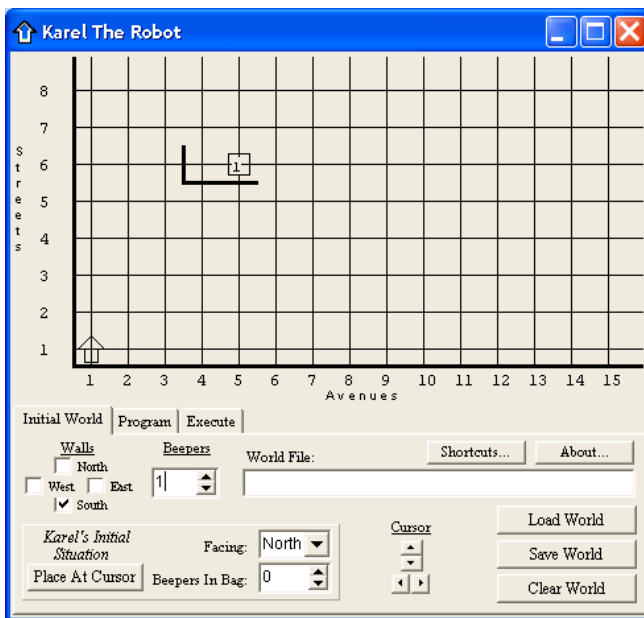


## CSE111- Lab Week of 2/25

In Lab you will learn about Karel the Robot's world and capabilities. The task for this week is to familiarize yourself with Karel and his world.

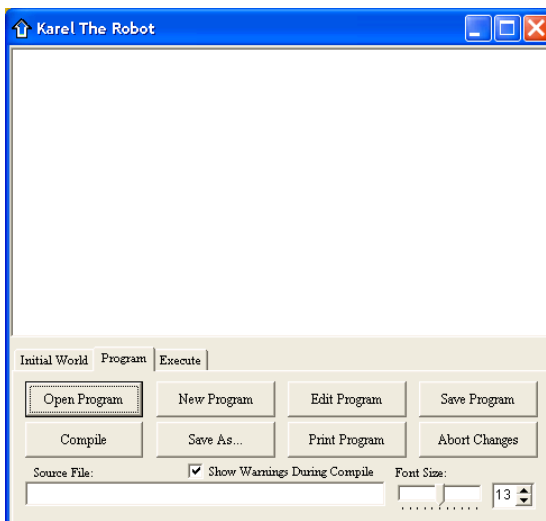
## I) Create and Save a World.

- 1) Create two **walls** and place a beeper behind them as show in this screen shot.
- 2) To create a **wall**, place the cursor (the pointer that moves around your computer screen) between two streets or avenues and click. Try moving the cursor around and clicking to see what happens. To remove a wall put in the wrong place just click on it again.
- 3) To place a **beeper** down in a location. Go to the intersection of a particular street and avenue click on that location. A small box will appear in that location. Go down to the bottom section of the screen. Find the section called Beepers. And change it from 0 to 1.
- 4) Save the World calling it **WorldOne.yourlastname**



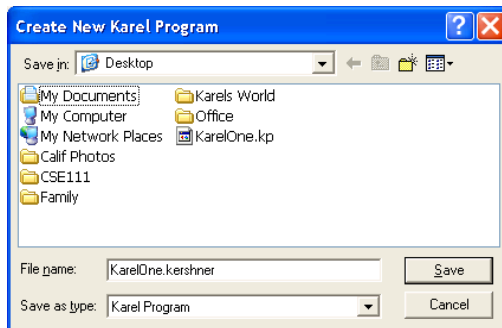
## II) Type in and Compile the program.

- 1) Click on the tab labeled Program
- 2) Click on the button labeled New Program

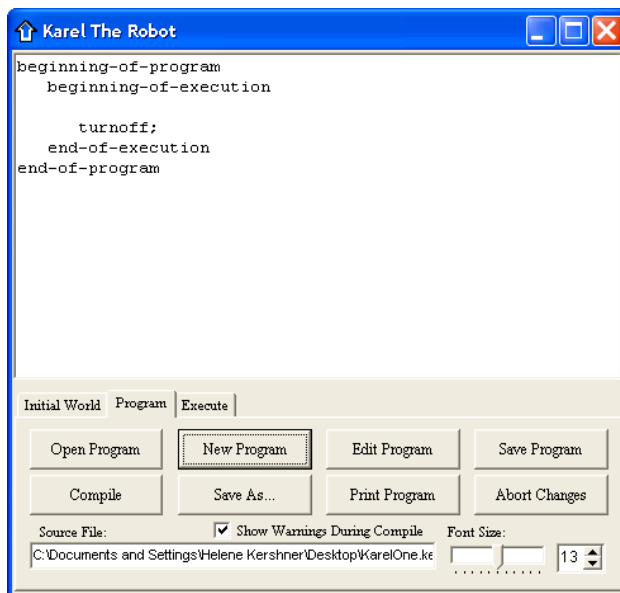


## CSE111- Lab Week of 2/25

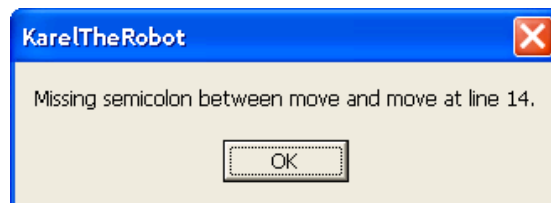
- 3) You will be asked to give your program a name. Call it KarelOne.yourlastname



- 4) Karel will now bring up a screen with the basic outline of a program.



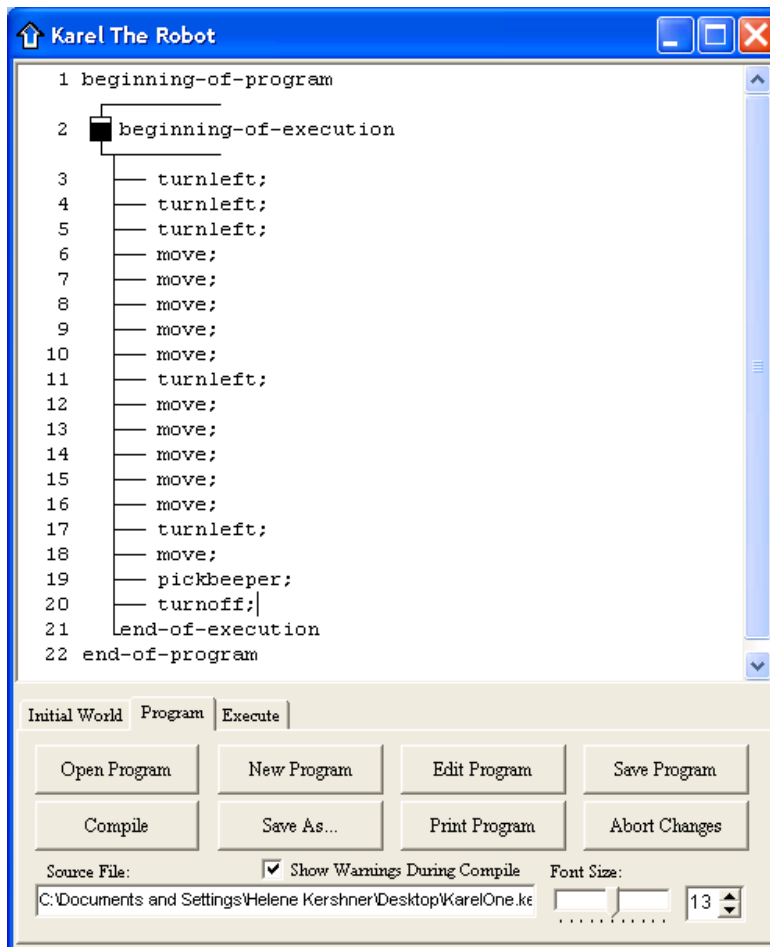
- 5) Between the words --- beginning-of-execution -- and --- turnoff -- type in the following program EXACTLY. Semicolon's matter (;). Your goal is to enter a program that moves Karel so it can pick up the beeper. From where Karel starts at the intersection of Avenue 1 and Street 1, the beeper is blocked by a wall.
- 6) After you type in the program.
- Save the program in the file you called KarelOne.yourlastname
  - Compile your program.
  - When you do this, you might get messages like



- Fix your errors, save and Compile until all errors are removed.

## CSE111- Lab Week of 2/25

This is what the program looks like after it has been properly Compiled and is ready to go.



Here is the Program!

```

beginning-of-program
  beginning-of-execution
    turnleft;
    turnleft;
    turnleft;
    move;
    move;
    move;
    move;
    move;
    turnleft;
    move;
    move;
    move;
    move;
    move;
    turnleft;
    move;
    pickbeeper;
    turnoff;
  end-of-execution
end-of-program
  
```

## CSE111- Lab Week of 2/25

III Execute (same as having Karel wake up and do something) the program.

- 1) Click the Initialize button to place Karel at what can be considered "home base" (where Street1 and Avenue 1 intersect).
- 2) When the following Pop-up appears just click OK.



- 3) Click the Run button and see what happens. If you typed in all the commands exactly, Karel will make some turns, avoid the wall and pickup the beeper. If that doesn't happen you will need to correct look over your program to see what you did wrong and correct it.
- 4) When you have solved this lab correctly, Print off a copy of your code. Sign it and put your person number and Lab on it and give it to the TA.