Linkbot Planning:

You will learn several new commands today to help you make the Linkbot's motion match the gravity car's motion. Everything after the two forward slashes is a comment that the computer will ignore, but the reader may find helpful. The following program makes the robot go at speed1 for one second, then speed2 for one second.

```
#include <linkbot.h> //loads linkbot module

CLinkbotI robot; //assigns the name robot to the robot

robot.connect(); //connects the robot

robot.setJointSpeeds(speed1,NaN,speed1); //changes the robot's speed:
degrees/second
robot.moveNB(x,NaN,-x);//it goes x degrees altogether
sleep(1); //sleeps for 1 second
robot.setJointSpeeds(speed2,NaN,speed2); //you should add your own comments
sleep(1);
```

How might this be useful for matching the motion of the gravity car?

Use the file gravityCar.ch to get your started. Remember to comment each line with things like, *what the line does* and *why you are doing that*.

Once you think your Linkbot is right, run your program, take data, then graph the data on the next page.

Does your graph match the gravity car graph? What needs to be fixed?

Are your graphs linear like the previous challenges or is it something else?

Linkbot Data

IV: _____ DV:_____

Data:

Graph: