

## Lab 1: Simple Alice manipulations

For this lab, work in pairs. Choose your own partner. Have one person drive for the entire lab, and then go through the whole thing again with the other person logged in and driving. So each of you should do roughly the same things. Save your work on your own network file space. You do NOT have to turn anything in for this lab.

1. Create a new world and add a knight and a sword (both in the Medieval folder). Using quad view, place the sword in the knight's right hand and set the vehicle property of the sword to be the knight's right hand. Call me or the TA over to check your work on this part when you finish.
2. Write a method for the knight called "waveSword" that makes him raise and lower his right arm as if he's brandishing his sword. Making his arm turn left and right a certain amount should look pretty good. Add a parameter for the number of times he is supposed to wave the sword, and add a loop to the method to make it happen.
3. Add a castle, dragon, and princess to the scene. Lower the castle into the ground to where the dark line is at ground level (the drawbridge will still be up above the ground). Put the princess at the very edge of the drawbridge. Move the camera back so that it can see the dragon and the princess (barely), and put the knight and sword near the camera facing the princess.
4. Write a method for the dragon to fly to the princess. This method should make the dragon move up, then move to where the princess is minus 2 meters.
5. In world.myFirstMethod add the instructions to tell the dragon to fly to the princess, then change the vehicle for the princess to be the entire dragon. Have the dragon turn around and then fly forward 40 meters in 10 seconds while the knight waves his sword 10 times.

Here's the story for the program you've just written: A princess has been grounded by her father and kept in a castle. Being a rather rebellious princess, she has sent email to the local dragon taxi service. The dragon arrives, the princess holds on to the dragon, and the dragon and princess escape while the knight shakes his arm (and sword) in protest. If you have additional time, work on trying to make the dragon's wings flap while it flies.