# Session 1: Practice Problems

## **Concept Questions**

- 1. Explain abstraction. Suggest and explain a real-world example and an IT specific example.
- 2. How are data abstraction and control abstraction similar? How are they different?
- 3. What does the term polyglot programmer mean. Why do you think it is easier to learn multiple programming languages, after you have learned the basics in a first language?
- 4. Explain how pair programming works.
- 5. Give 3 tips for having a good pair programming experience.

### **Programming Assignments**

Make sure that your scripts start when you click the green flag on the toolbar.

### Make a Sprite Sing!

Explore the *Snap!* blocks available on the Sounds palette. You may need to import sounds in order to populate the block dropdowns. Write a script to make a sprite sing a song using blocks from the Looks and Sounds palettes. (You can use other blocks too.)



Note that you can also import different sprites by selecting Costumes... in the File menu.

If you first click on the Stage in the "Sprite Corral" (the lower right area of the Snap! Window), then click on the File menu, the Costumes... option changes to Backgrounds...

#### Forever in Motion

Using a forever loop and the blocks from the Motion tab, make a sprite continuously move around *the entire* stage area, forever and ever and ever. Use the when key pressed hat block to make it do something special when a key is pressed.

### Share

If you do something really neat, share it with others in the chat room (bonus point reminder). Remember to give your Snap user name and the exact project name when sharing in chat so others can view your project.