

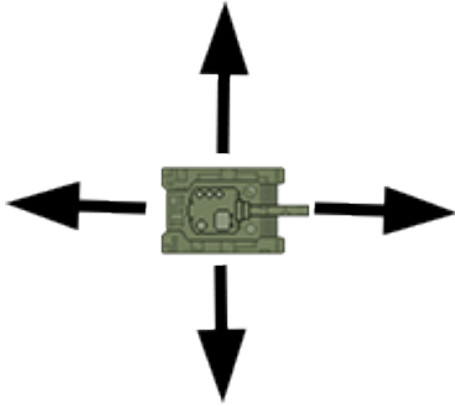
## Color Sensor - Tank

### “1. Directional Arrows,” 2. “Color Sensor,” 3. “Fire Shells” & 4. “Destroy Opponent” Gradesheet – (45 pts.)

**Goal:** Students will be introduced to new code that they will use to recreate the models – the models are on the class ECS site.

Each program builds upon the skills learned in the previous program. Any new code will be provided to the students.

All of the remaining code necessary to create this program have been used by the students to develop past programs – so please copy the code from your past programs and use it to recreate these programs.



#### Program #1: Moving the Tank Using Directional Arrows (8 pts.)

In the last lesson, you moved the Princess using Directional Keys. Step #1, make the tank successfully turn and drive in four directions using the Directional Keys on your keyboard. I am providing you with one line of code that will help you write the code for the Directional Keys, or...just copy the Princess code.



#### Grade Sheet (5pts.)

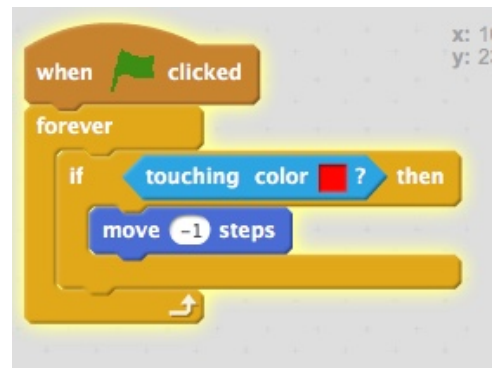
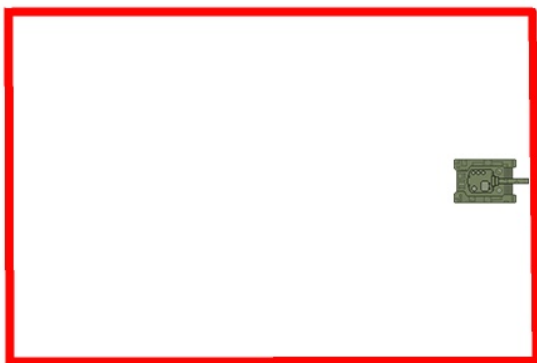
The Tank can turn and move in an upward direction when I select the up arrow key.	2pts.
The Tank can turn and move in an downward direction when I select the down arrow key.	2pts.
The Tank can move to the right when I select the right arrow key.	2pts.
The Tank can move left when I select the left arrow key.	2pts.

#### Program #2: “The Tank Stalls When It Touches A Color Barrier.” (13 pts.)

The Tank drives up to each of the four colored walls, but when it tries to cross, it bounces back at least 1 step.

**Note:** Take a look at the code I am providing you.

**Additional Hint:** any problems may be caused by which Sprite or Background you decided to place it.



#### Grade Sheet

The game starts with a Green flag. When the tank approaches any of the four walls, it will bounce back at least a step.	10pts.
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