**Finch Robot Challenges with Java**

Basic Commands:

To move:

**myFinch.setMove(String direction, double distance, double speed);**

The String direction should be either “F” or “B”, meaning forward or backward.

To turn:

**myFinch.setTurn(String direction, double angle, double speed);**

The String direction should be either “L” or “R”, meaning left or right.

To change tail color:

**myFinch.setTail(int red, int green, int blue);**

To change beak color:

**myFinch.setBeak(int red, int green, int blue);**

**More commands can be found at: https://www.birdbraintechnologies.com/finch/java/library/**

The first few challenges will be demonstrated in the workshop.

1. Move the robot forward one meter
2. Make the robot turn 360°
3. Ask the user to enter a speed and distance and have the finch perform it. (Hint: use the java.util.Scanner)
4. Make the robot change its beak and tail color to cycle through the rainbow three times.
5. Make the robot move in a perfect square five times.
6. Make the robot tail print your name and then print a smiley face ☺. (Hint: this is an advanced challenge but try using setDisplay(int[] ledValues)

Final Challenge:

1. Make the robot navigate the maze in the room.