Assignment week 3

USING METHODS and CONDITIONALS

Update

- Solution inside `SwagBot.java`

Initial Setup

1. copy the following code into a file called `SwagBot.java`
2. fill in the blanks to make the code run
    - edit implement code where the comments instruct you to do so
    - change to java that should go there

FILE: `SwagBot.java`

```
class SwagBot {

    // this method should return which direction robot is currently heading
    public static <returnType> calculateRobotDirection(double leftSpeed, double
rightSpeed) {
        String direction = "";
        // check if robot is turning right
        if (leftSpeed > rightSpeed) {
            direction = "right";
        }
        else if(/* code */) {
            dierction = "left";
        }
        else if(/* code */) {
            direction = "fwd";
        }
        else {
            direction = "bkwd";
        }

        return direction; // this return whatever `direction` is back to whoever
(whomever?) called it
    }

    // should print summar of data passed in as parameter
    /* example output:
        Robot name: SwagBot, Drive type: tank, current driving direction: fwd
        Details: leftspeed = 0.5, rightspeed = 0.5
    */
    // Notice 'void' in function header, this means function does not return
anything
    public static void printDashboard(double name,
                                      double leftSpeed,
                                      double rightSpeed,
                                      String dir,
```

```
                                    String driveType) {
        // put code here
        // first line

        // second line

    }

    /*
Write a function named "betterDashboard" that does not require "dir" parameter
hint: inside your new function you can call `calculateRobotDirection to get the
direction
    */

    public static void main(String[] args) {
        final String robotName = "SwagBot";
        double leftSpeed = 0.0; // should be between [-1.0, 1.0]
        double rightSpeed = 0.0;
        String direction = null; // 'left', 'right', 'fwd', 'back'
        String driveType = "tank"; // either 'tank' or 'arcade'

        // call printDashboard to print current state of robot
        direction = calculateRobotDirection(leftSpeed, rightSpeed);
        printDashboard(robotName, leftSpeed, rightSpeed, direction, driveType);

        // make sure robot is stopped
        leftSpeed = 0; rightSpeed = 0;
        direction = calculateRobotDirection(leftSpeed, rightSpeed);

        // go forward with full speed
        leftSpeed = 1.0;
        rightSpeed = 1.0;
        direction = calculateRobotDirection(leftspeed, rightSpeed);

        // write code to go fwd with half speed
        leftSpeed = //code
        rightSpeed = //code
        direction = // call calculateRobotDirection

        // write code to go bkwd with full speed -1, -1


        // write code to turn right


        // write code to turn left
    }
}
```

RESOURCES: - this repository: https://github.com/shahhaard47/JFK-JavaAssignment - methods: https://www.tutorialspoint.com/java/java_methods.htm - conditionals: https://www.tutorialspoint.com/java/if_else_statement_in_java.htm