The ToyRobot challenge has been implemented in Java. Java utilities are needed to execute this program.

The main class (Robot.class) is placed inside the package com.toypacks.

The program accepts below commands from an input file.

PLACE X Y F

MOVE

LEFT

RIGHT

REPORT

As per the instructions provided in the challenge, the program ignores any other command which is not part of the above list.

It also enforces the format of PLACE command as below:

PLACE X Y F

The program allows only values between 0 and 5 for X and Y coordinates.

For ‘F’ it allows below directions:

EAST

WEST

NORTH

SOUTH

Any other numbers or text followed by PLACE makes it an invalid command.

The program accepts two command line arguments:

1. To specify folder path for the input file. This should be the absolute path.

2. File name

Pre-Requisites:

JRE1.7 or above.

Please make sure bin folder has been added to PATH environment variable to make sure Java utilities can be run from command line.

Instructions:

1. Unzip the provided zip file(Robot\_Assignment.zip)

2. Prepare an input file with set of commands. A sample file (input\_1.txt) is available in InputFiles folder inside the zip.

3. To execute the program, open command prompt and change to the directory where the zip has been extracted.

4. Run the Robot class specifying input file location and file name

Eg: java -cp ToyRobot.jar com.toypacks.Robot "/Users/swathireddy/Documents/Robot\_Assignment/InputFiles" "input\_1.txt"

5.The program outputs the coordinates of the Robot including the direction it is facing, with every ‘REPORT’ command. Along with this text, it also outputs text at various places indicating validity of the provided command and the action being processed.

Running Unit tests:

1. JUnit tests have been packaged inside the same jar.

2. There are in total 5 test cases. And each of the tests processes commands from one the test files available inside InputFiles folder (eg:testfile\_<n>.txt)

3. All the tests are invoked from the main method inside TestRunner class.

4. After execution of the tests, the TestRunner outputs Total test cases being run and the number of failures. (Eg: Total test cases:5

Number of failures:0)

5. To execute the unit tests, invoke TestRunner class from the directory where the zip has been extracted to by adding junit dependency jars available in the extracted folder to the class-path.Here is the sample command to be used to invoke the tests: java -cp junit.jar:org.hamcrest.core\_1.3.0.v20180420-1519.jar:ToyRobot.jar com.toypacks.TestRunner