**Toy Robot Simulator – Solution**

## How to run the program –

find the executable jar “ToyRobotSimulator.jar” and provide a text file with all the command in it. Here is the command sample

java –jar ToyRobotSimulator.jar <fileNameWithPath>

## Classes and description

**Command.java** – This is a java enum that contains all the valid commands for the simulator.

**Direction.java** – This too is a java enum that contains name of 4 sides namely North,East,South,West. This enum is also used to evaluate the next direction when a Right or a Left command is executed.

**Position.java** – Used to depict the location and the direction of the Robot. This class also have getStringFormat method that emits the output in a required format as per REPORT command

**Robot.java** – This class accepts and executes all the commands and updates the position for the Robot. All the logic for command can be found in this class.

**TableTop.java** – This class represents boundary of limit of the Robot movement. It also contains a method that whether a particular position is within the boundary or not.

**SimulatorStart.java** – Used to start the Program, it accepts a text file as an command line argument. The text file should provide each command on a new line.

**RobotTest.java** – This file is not included in the jar but source can be viewed to see tests and results. It is based on Junit5

## Test Data

find the file commands.txt the same data is used in Unit test

## Results of test data execution

Results of the test data can be found in the UnitTest java file. Please view every assert statement.
The index is 0 based.

## Improvements

Use circular list than a list to calculate direction