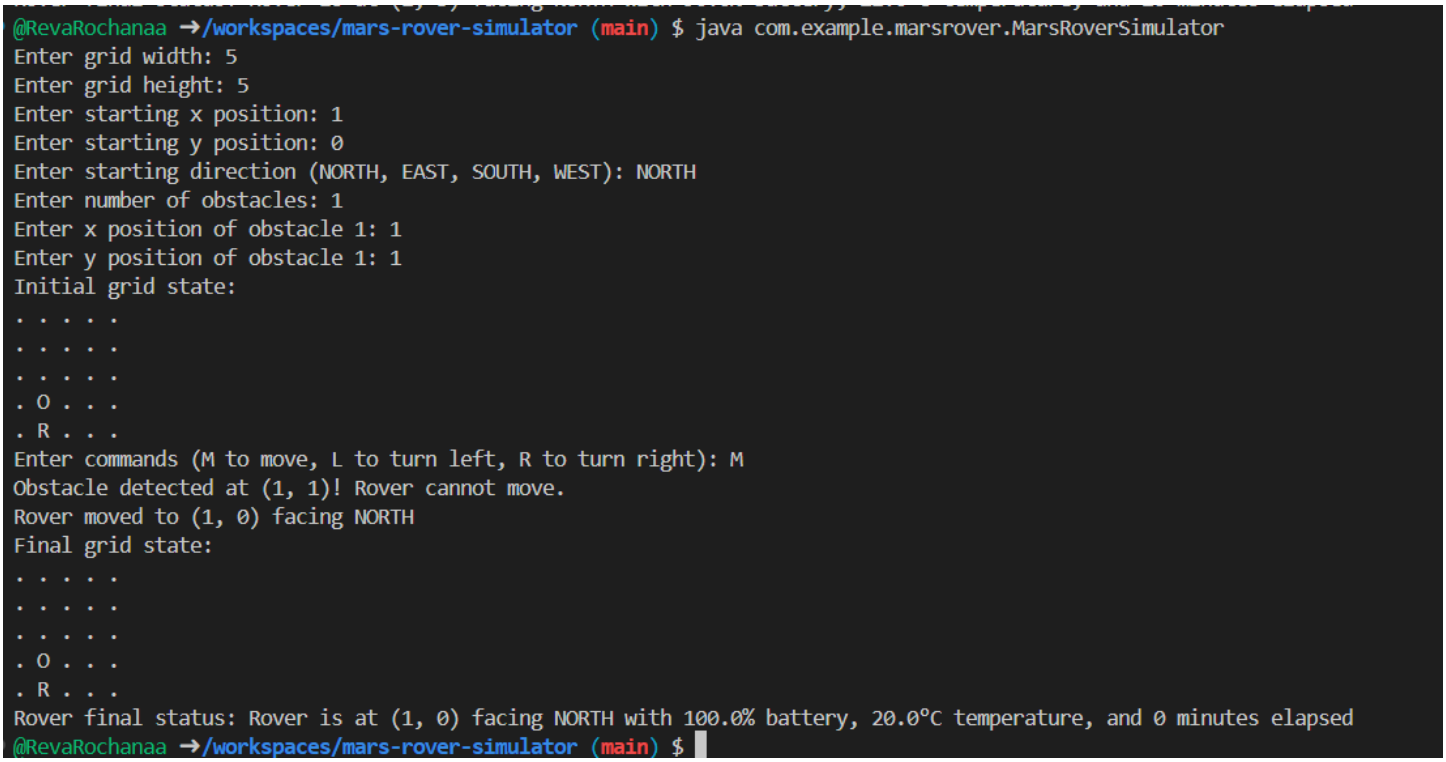
Project Overview

ROVER

OUTPUT SNAPSHOTS

OUTPUT CONDITION FOR ROVER OVER THE OBSTRACLE

TEST 1:



TEST 2:

```
Enter grid width: 10
Enter grid height: 10
Enter starting x position: 3
Enter starting y position: 3
Enter starting direction (NORTH, EAST, SOUTH, WEST): SOUTH
Enter number of obstacles: 2
Enter x position of obstacle 1: 2
Enter y position of obstacle 1: 3
Enter x position of obstacle 2: 4
Enter y position of obstacle 2: 5
Initial grid state:
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . O . . . . .
. . . . . .
. . O R . . . . . .
. . . . . .
. . . . . .
. . . . . .
Enter commands (M to move, L to turn left, R to turn right): RMLRMMLR
Obstacle detected at (2, 3)! Rover cannot move.
Rover moved to (3, 3) facing WEST
Obstacle detected at (2, 3)! Rover cannot move.
Rover moved to (3, 3) facing WEST
Obstacle detected at (2, 3)! Rover cannot move.
Rover moved to (3, 3) facing WEST
Final grid state:
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . O . . . . .
. . . . . .
. . O R . . . . . .
. . . . . .
. . . . . .
. . . . . .
Rover final status: Rover is at (3, 3) facing WEST with 100.0% battery, 20.0°C temperature, and 0 minutes elapsed
```

ROVER CANNOT MOVE OUT OF BOUND

```
@RevaRochanaa ➜/workspaces/mars-rover-simulator (main) $ java com.example.marsrover.MarsRoverSimulator
Enter grid width: 5
Enter grid height: 5
Enter starting x position: 2
Enter starting y position: 3
Enter starting direction (NORTH, EAST, SOUTH, WEST): EAST
Enter number of obstacles: 1
Enter x position of obstacle 1: 4
Enter y position of obstacle 1: 4
Initial grid state:
. . . . O
. . R . .
. . . . .
. . . . .
. . . . .
Enter commands (M to move, L to turn left, R to turn right): LMLRML
Rover moved to (2, 4) facing NORTH
Move out of bounds! Rover cannot move.
Rover moved to (2, 4) facing NORTH
Final grid state:
. . R . O
. . . . .
. . . . .
. . . . .
. . . . .
Rover final status: Rover is at (2, 4) facing WEST with 95.0% battery, 20.5°C temperature, and 10 minutes elapsed
@RevaRochanaa ➜/workspaces/mars-rover-simulator (main) $
```