**Scenario 1: robotic hoover starts in a clean room**

Given:

* No patches of dirt in the room
* Driving instructions: NNEESW
* Starting position [1, 2]

When: then program finishes the run

Then: The number of patches of dirt clean up should be 0

**Scenario 2: Hoover moves through a room with patches of dirt and returns to the cleaned area**

Given:

* Patches of dirt at coordinates [[3,3]]
* Driving instructions: NNNNSSSS
* Starting position [1, 1]

When: The program runs

Then: The number of patches of dirt the hoover cleaned up should be 2

**Scenario 3: Hoover encounters a wall**

Given:

* Driving instructions: SSWW
* Starting position [0, 0]

When: the program runs

Then: the number of coords should be 0, 0

**Scenario 4: Hoover encounters 2 patches of dirt along the way**

Given:

* Patches of dirt at coordinates [1, 2], [1, 3],
* Driving instructions: NN
* Starting position [1, 1]

When: The program runs

Then: The number of patches of dirt the hoover cleaned up should be 2

**Scenario 5: Hoover encounters walls and patches of dirt along the way**

Given:

* Patches of dirt at coordinates [1, 2], [1, 3],
* Driving instructions: NNWW
* Starting position [1, 1]

When: The program runs

Then: The number of patches of dirt the hoover cleaned up should be 2

**Scenario 6: Room has 2 patches and instructions makes hoover hit the wall**

Given:

* Patches of dirt at coordinates [4, 4] and [4, 2]
* Driving instructions: SW
* Starting position [0, 0]

When: The program runs

Then: The number of patches of dirt the hoover cleaned up should be 0

**Scenario 7: Hoover starts on a patch of dirt**

Given:

* Patch of dirt at coordinates (1, 1)
* Driving instructions: N
* Starting position [1, 1]

When: The program runs

Then: The number of patches of dirt the hoover cleaned up should be 1

**Scenario 8: Patch of dirt is outside the room**

Given:

* Patch of dirt at coordinates (6, 9)
* room size (5,5)
* Driving instructions: NNNNNNNNNEEEEEE

When: The program runs

Then: The number of patches of dirt the hoover cleaned up should be 0

**Scenario 9: Hoover encounters multiple patches of dirt at the same location**

Given:

* Patches of dirt at coordinates [0, 2], [0, 2], [0, 2]
* Driving instructions: NNNN
* Starting position [0, 0]

When: The program runs

Then: The number of patches of dirt the hoover cleaned up should be 1

**Scenario 10: Hoover starts outside of the room**

Given:

* Driving instructions: NNNEEESSSWWW
* Starting position [15, 15]

When: The program runs

Then: Hoover shouldn’t be able to run outside of the limits of the room

**Senario 11: Hover Finds patch of dirt in north and east**

Given:

* Driving instructions: NE
* Starting position: [3.3]
* Patches [3, 4], [4, 4]

When: the program runs

Then: Hoover should stop at the correct spot [1,1]

**Senario 12: Hover Finds patch of dirt in South and Weast**

Given:

* Driving instructions: SW
* Starting position: [3.3]
* Patches [3, 2], [2, 2]

When: the program runs

Then: Hoover should stop at the correct spot [1,1]

**To run:**

**Or**

**Npx cypress open**