Set 1
1. Does the bug always move to a new location? Explain.
    Answer: No. The bugs always move to the first empty location they meet when they rotate clockwise. Therefore, when there is nothing prevent them from change to a new direction, they will move alone the same path.
2. In which direction does the bug move?
    Answer: The direction of clockwise.
3. What does the bug do if it does not move?
    Answer: it rotates
4. What does a bug leave behind when it moves?
    Answer: Flowers that go dark when a bug moves.
5. What happens when the bug is at an edge of the grid? (Consider whether the bug is facing the edge as well as whether the bug is facing some other direction when answering this question.)
    Answer: If there is nothing in front of the bug, it keeps moving. If it encounters the crossover point of two edges, it rotate in the direction of clockwise til nothing in front of it.
6. What happens when a bug has a rock in the location immediately in front of it?
    Answer: It rotates 45 degree clockwise
7. Does a flower move?
    Answer: No, the flowers never move.
8. What behavior does a flower have?
    Answer: it turns dark.
9. Does a rock move or have any other behavior?
    Answer: No, it neither moves nor has anyother behaviors.
10. Can more than one actor (bug, flower, rock) be in the same location in the grid at the same time?
    Answer: No. When one actor apears at a location, the location can't be allowed to allocate other actors.

Exercises

By clicking on a cell containing a bug, flower, or rock, do the following.

1. Test the setDirection method with the following inputs and complete the table, giving the compass direction each input represents.

Degrees	Compass Direction
0	North
45	Northeast
90	east
135	southeast
180	south

225   southwest

270   west

315   northwest

360   north

2. Move a bug to a different location using the moveTo method. In which directions can you move it? How far can you move it? What happens if you try to move the bug outside the grid?

Answer: I can move it in every direction. I can move it cross the whole gird. If I try to move the bug outsid the grid, a dialog will show up and tell me that the location is invalid

3. Change the color of a bug, a flower, and a rock. Which method did you use?

Answer: the method of setColor()

4. Move a rock on top of a bug and then move the rock again. What happened to the bug?

Answer: if we move a rock on the location of a bug then move the rock again, we can find out that the bug is disapear. The bug is dead!