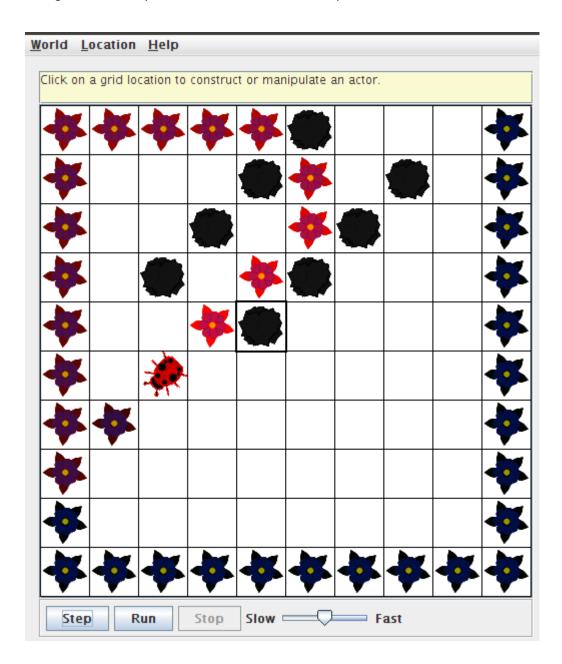
## Do you know

Set 1

1.A bug does not always move to a new location, it always move in a circle at the end:



- 2. A bug will walk to the **north** at the beginning, but it will move in **clockwise direction** when it came across the wall or an actor or a rock.
- 3. The bug will **turn around** all the time if it does not move.
- 4. A bug will leave a pink flower hehind when it moves and the color of flowers will turn into purple slowly.

- 5. When a bug is at the end of an edge of the grid, it will move in clockwise direction.
- 6. When a bug has a rock in the location immediately in front of it, it will turn around **by 45degreee** each time and then **move** if there is a way to go.
- 7. A flower does not move
- 8. The color of a flower is pink at first, and then it will turn into purple.
- 9. A rock does not move or have any other behavior
- 10. There can't be more than one actor (bug, flower, rock) be in the same location in the grid at the same time.

## **Exercises**

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. The bug can be moved towards everywhere inside the grid.

  We can take the grid as a matrix and the bug can be move from (0,0) to (9,9)

  If we try to move the bug outside the grid, then a error will occur.
- 3. We can use the method void setColor(java.awt.Color) to Change the color of a bug, flower or a rock.
- 4. The bug will disapeare