**Zombie Project**

You will build two classes for this project, Zombie and VictimBug. Each is explained below:

**VictimBug**

Each step, all VictimBugs on the grid will move away from the Zombie. They still drop flowers that match the color of the VictimBug. If a VictimBug reaches the edge of the grid, it will stand still, unless it is possible to move further away from the Zombie, without leaving the grid. This may change as the Zombie chases its target.

A VictimBug will turn yellow when retreating. If it is standing still (trapped on grid's edge), it is blue.

The VictimBug that is being chased by the Zombie will be green and doesn’t change its color to yellow or blue.

VictimBug order of Events:

1. Each VictimBug will try to find the adjacent Location that is the furthest distance away from the Zombie.
2. If it finds a Location that is further away, it will move there and change its color to Yellow.
3. If it cannot find a Location that is further away than it already is (usually trapped on the edge of the Grid), it will stay put and turn its color to Blue.

**Zombie**

**\*\*\*There will only ever be ONE Zombie in the Grid.**

On a step, a Zombie will select a VictimBug to chase. The Zombie will always choose the VictimBug that is furthest from the Zombie itself. Once it selects its victim, that VictimBug will be turned green and will remain green until it is eaten by the Zombie. The Zombie will also destroy any Flowers that get in its way. (Any adjacent Flowers are destroyed) The Zombie is focused only on the target, so any adjacent VictimBugs that aren’t the targeted victim will not be removed from the grid. Once the Zombie destroys its victim, it will choose a new VictimBug (furthest away) and begin chasing it. If there are no more VictimBugs left, the Zombie will remove itself from the Grid.

The order in which things happen should be:

1. Choose a target if doesn’t have one already. Turn that target green.
2. If the Victim is adjacent to the Zombie, remove it from the grid. If no VictimBugs remain at this point, remove the Zombie from the grid.
3. Remove any adjacent Flowers.
4. Move the Zombie 1 location closer to its targeted victim. (If the target wasn’t eaten already) If it eats its victim, it will not move on that step, awaiting the next step to select a new victim to chase.

You need to come up with your own GIF for the Zombie.