

I. DancingBug_using an array and super() and ch1lab1

A) Create the DancingBugRunner class

It should create an array and pass it as a parameter to the DancingBug constructor.

Note: DancingBugRunner class will have at least the following import statements:

```
import info.gridworld.actor.ActorWorld;  
import info.gridworld.grid.Location;  
import java.awt.Color;
```

B) Create a class called DancingBug that extends Bug (see Gridworld Chapter 1 Lab 1)

A DancingBug “dances” by making different turns before each move. The DancingBug constructor has an integer array as parameter. The integer entries in the array represent how many times the DancingBug turns before it moves. For example, an array entry of 5 represents a turn of 225 degrees (recall one turn is 45 degrees). When a DancingBug acts, it should turn the number of times given by the current array entry, then act like a Bug (hint: super.etc). In the next move, it should use the next entry in the array.

For a C (15 pts): Must use a super call

For a B (17 pts): See the requirements for a C above and do one of the two following items

- 1) each intermediate turn of the bug needs to be seen not just the final turned angle
- 2) after carrying out the last turn in the array, it should start again with the initial array value so that DancingBug continually repeats the same turning pattern.

For an A (20 pts): Do all items above.

Save the project as GWch3prog1

When perfect, show your teacher the coding and output (run)

(teacher signature)

Turn in this sheet to be graded!