SET 9

1. Why doesn’t CrabCritter override the processActors method?

It doesn’t need to override the processActors method because the critter class also eats all actors that are neighboring the locations gotten from the getActors.

1. Describe the process a CrabCritter uses to find and eat other actors. Does it always eat all neighboring actors? Explain

The getActors method of the CrabCritter gets Actors that are in the left front, directly in front, or in the right front of the crab. Therefore, when the processActors method eats all items gotten from the getActors method, it eats actors found in those locations.

1. Why is the getLocationsInDirections method used in CrabCritter?

getLocationsInDirection gives an array of all possible directions and this array brings out possible neighbors for the crab to eat.

1. If a CrabCritter has location (3, 4) and faces south, what are the possible locations for actors that are returned by a call to the getActors method?

(4,3), (4,4), and (4,5)

1. What are the similarities and differences between the movements of a CrabCritter and a Critter?

They are similar in which they both choose their next locations to move randomly.

They are different in which the CrabCritter only moves horizontally. It will also turn right/left when it can’t move anymore whereas the critter doesn’t turn.

1. How does a CrabCritter determine when it turns instead of moving?

If the current location of the crab critter is the same as the potential location in which it is to move to, it will turn.

1. Why don’t the CrabCritter objects eat each other?

In the processActors method, it is written in the code that it eats only objects that aren’t rocks or critters.