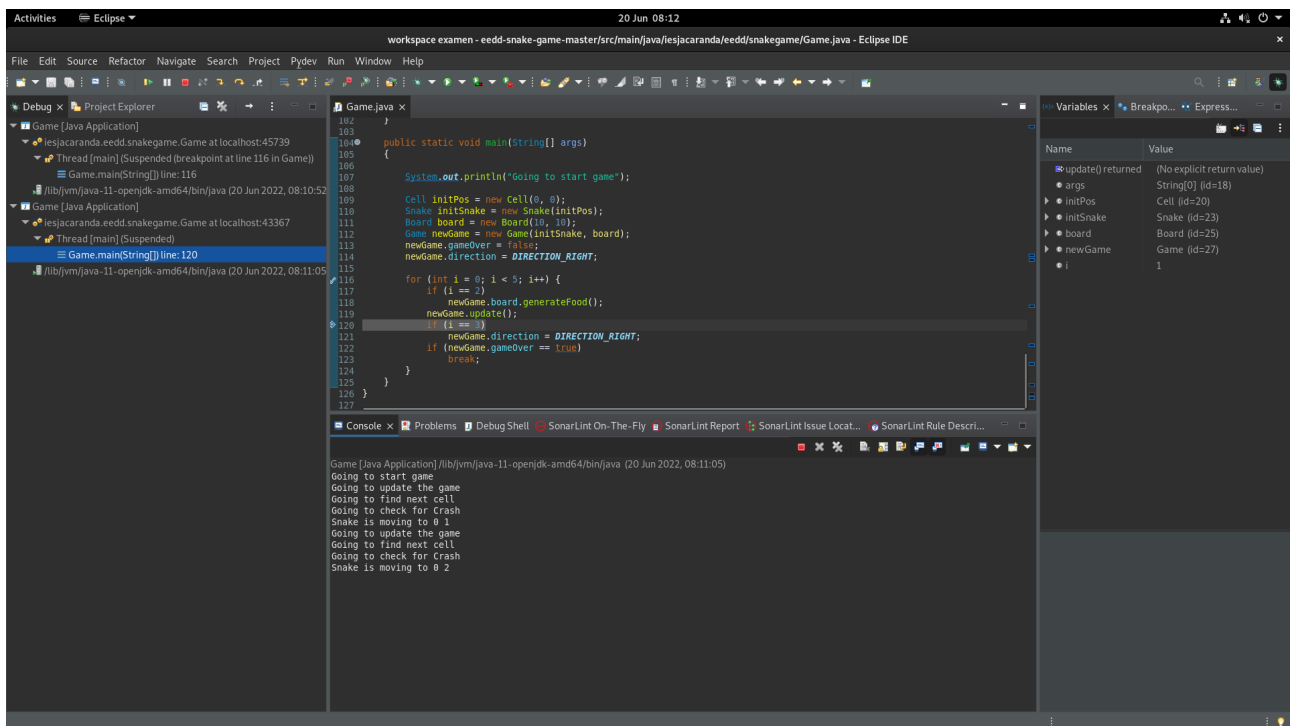
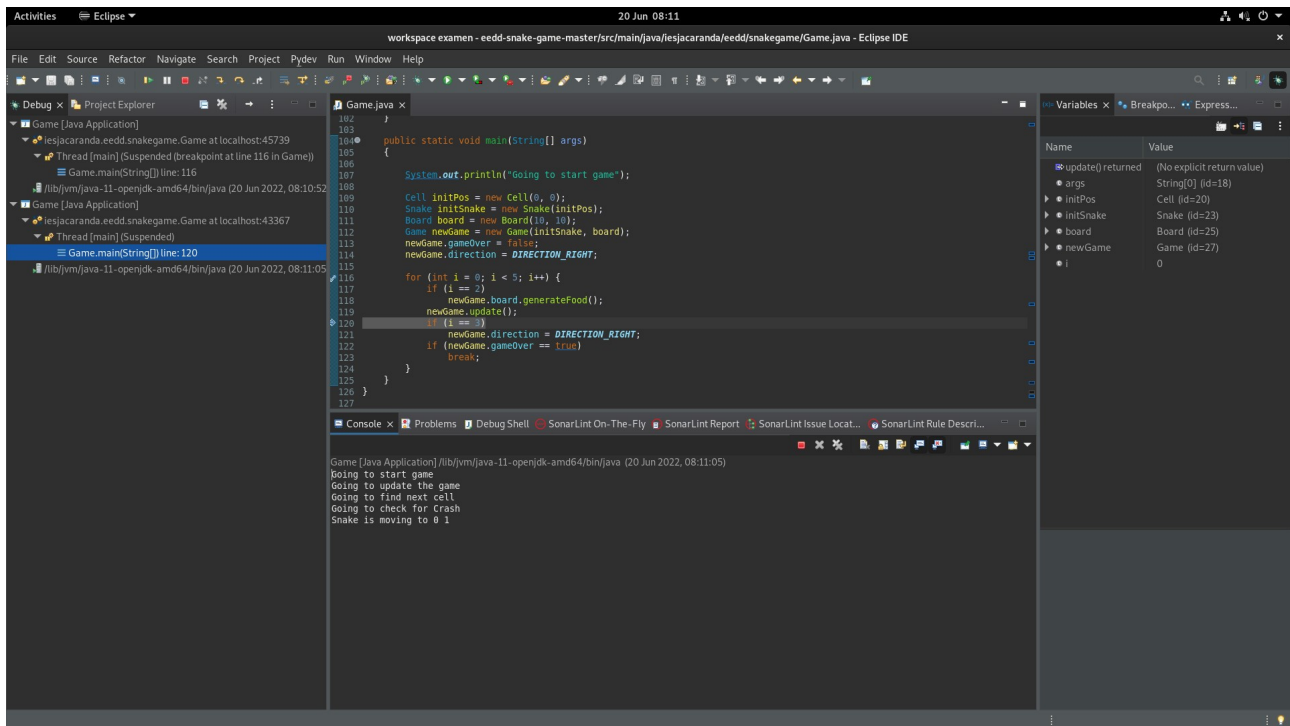


EJERCICIO1

A)



Activities Eclipse 20 Jun 08:12 workspace examen - eedd-snake-game-master/src/main/java/lesjagaranda/eedd/snakegame/Game.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Pydev Run Window Help

Debug X Project Explorer

- Game [Java Application]
- lesjagaranda.eedd.snakegame.Game at localhost:45739
 - Thread [main] (Suspended (breakpoint at line 116 in Game))
 - Game.main(String[]) line: 116
- /lib/jvm/java-11-openjdk-amd64/bin/java (20 Jun 2022, 08:10:52)
- Game [Java Application]
- lesjagaranda.eedd.snakegame.Game at localhost:43367
 - Thread [main] (Suspended)
 - Game.main(String[]) line: 119
- /lib/jvm/java-11-openjdk-amd64/bin/java (20 Jun 2022, 08:11:05)

Game.java

```
182 }
183
184 public static void main(String[] args)
185 {
186     System.out.println("Going to start game");
187
188     Cell initPos = new Cell(0, 0);
189     Snake initSnake = new Snake(initPos);
190     Board board = new Board(10, 10);
191     Game newGame = new Game(initSnake, board);
192     newGame.gameOver = false;
193     newGame.direction = DIRECTION_RIGHT;
194
195     for (int i = 0; i < 5; i++) {
196         if (i == 2)
197             newGame.board.generateFood();
198         newGame.update();
199         if (i == 3)
200             newGame.direction = DIRECTION_RIGHT;
201         if (newGame.gameOver == true)
202             break;
203     }
204 }
205 }
```

Console

Game [Java Application] /lib/jvm/java-11-openjdk-amd64/bin/java (20 Jun 2022, 08:11:05)

```
Going to start game
Going to update the game
Going to find next cell
Going to check for Crash
Snake is moving to 0 1
Going to update the game
Going to find next cell
Going to check for Crash
Snake is moving to 0 2
Going to generate food
Food is generated at: 5 1
```

Variables

| Name | Value |
|-------------------|----------------------------|
| generateFood() re | (No explicit return value) |
| args | String[] (id=18) |
| initPos | Cell (id=20) |
| initSnake | Snake (id=23) |
| board | Board (id=25) |
| newGame | Game (id=27) |
| i | 2 |

Activities Eclipse 20 Jun 08:12 workspace examen - eedd-snake-game-master/src/main/java/lesjagaranda/eedd/snakegame/Game.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Pydev Run Window Help

Debug X Project Explorer

- Game [Java Application]
- lesjagaranda.eedd.snakegame.Game at localhost:45739
 - Thread [main] (Suspended (breakpoint at line 116 in Game))
 - Game.main(String[]) line: 116
- /lib/jvm/java-11-openjdk-amd64/bin/java (20 Jun 2022, 08:10:52)
- Game [Java Application]
- lesjagaranda.eedd.snakegame.Game at localhost:43367
 - Thread [main] (Suspended)
 - Game.main(String[]) line: 120
- /lib/jvm/java-11-openjdk-amd64/bin/java (20 Jun 2022, 08:11:05)

Game.java

```
182 }
183
184 public static void main(String[] args)
185 {
186     System.out.println("Going to start game");
187
188     Cell initPos = new Cell(0, 0);
189     Snake initSnake = new Snake(initPos);
190     Board board = new Board(10, 10);
191     Game newGame = new Game(initSnake, board);
192     newGame.gameOver = false;
193     newGame.direction = DIRECTION_RIGHT;
194
195     for (int i = 0; i < 5; i++) {
196         if (i == 2)
197             newGame.board.generateFood();
198         newGame.update();
199         if (i == 3)
200             newGame.direction = DIRECTION_RIGHT;
201         if (newGame.gameOver == true)
202             break;
203     }
204 }
205 }
```

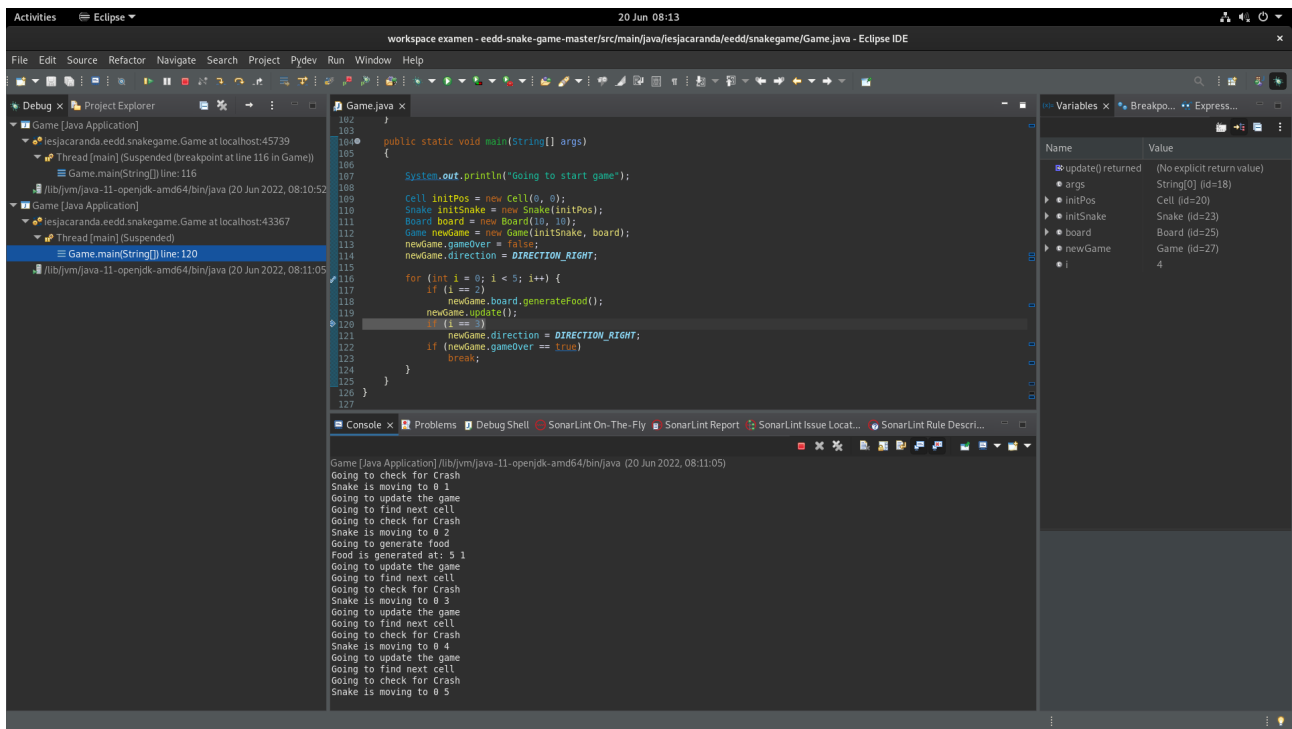
Console

Game [Java Application] /lib/jvm/java-11-openjdk-amd64/bin/java (20 Jun 2022, 08:11:05)

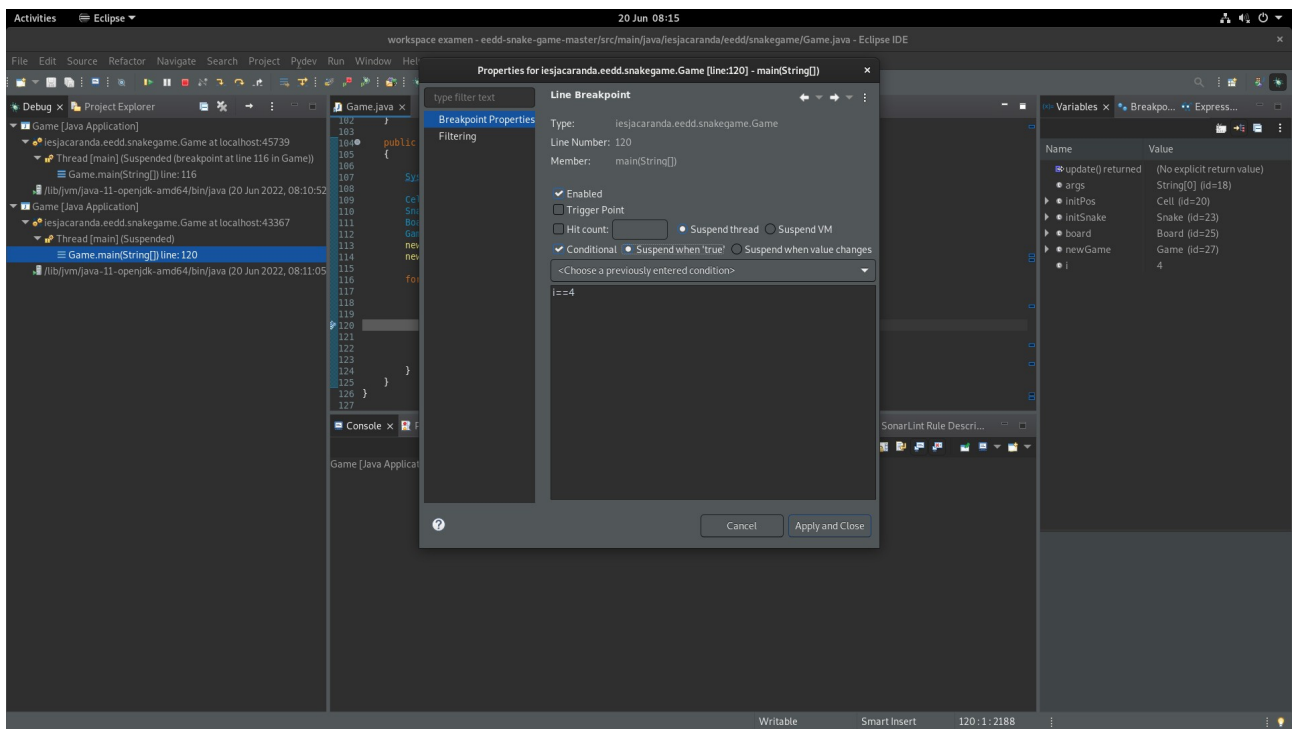
```
Going to start game
Going to update the game
Going to find next cell
Going to check for Crash
Snake is moving to 0 1
Going to update the game
Going to find next cell
Going to check for Crash
Snake is moving to 0 2
Going to generate food
Food is generated at: 5 1
Going to update the game
Going to find next cell
Going to check for Crash
Snake is moving to 0 3
Going to update the game
Going to find next cell
Going to check for Crash
Snake is moving to 0 4
```

Variables

| Name | Value |
|-------------------|----------------------------|
| update() returned | (No explicit return value) |
| args | String[] (id=18) |
| initPos | Cell (id=20) |
| initSnake | Snake (id=23) |
| board | Board (id=25) |
| newGame | Game (id=27) |
| i | 3 |



B)



EJERCICIO2

A)

The screenshot shows the Eclipse IDE interface with the following components:

- Project Explorer:** Lists various projects, with 'eedd-snake-game-master' selected.
- Editor:** Displays the 'Game.java' file with the following code:

```
102 }
103
104 public static void main(String[] args)
105 {
106     System.out.println("Going to start game");
107
108     Cell initPos = new Cell(0, 0);
109     Snake initSnake = new Snake(initPos);
110     Board board = new Board(18, 18);
111     Game newGame = new Game(initSnake, board);
112     newGame.gameOver = false;
113     newGame.direction = DIRECTION_RIGHT;
114 }
115
```
- Problems View:** Shows 19 items with SonarLint issues. The issues are summarized in the table below.
- Variables View:** Shows the current state of variables in the scope.

| Resource | Date | Description |
|------------|------|--|
| Board.java | | 🟡 Declare "COL_COUNT" on a separate line. |
| Board.java | | 🟡 Rename this field "COL_COUNT" to match the regular expression "[a-z][a-zA-Z0-9]*\$". |
| Board.java | | 🟡 Rename this field "ROW_COUNT" to match the regular expression "[a-z][a-zA-Z0-9]*\$". |
| Board.java | | 🟡 Use "java.util.Random.nextInt()" instead. |
| Board.java | | 🟡 Use "java.util.Random.nextInt()" instead. |
| Board.java | | 🔴 Replace this use of System.out or System.err by a logger. |
| Board.java | | 🔴 Replace this use of System.out or System.err by a logger. |
| Cell.java | | 🟡 Declare "col" on a separate line. |
| Game.java | | 🟡 Declare "DIRECTION_RIGHT" and all following declarations on a separate line. [+3 locations] |
| Game.java | | 🟡 Immediately return this expression instead of assigning it to the temporary variable "nextCell". |
| Game.java | | 🟡 Remove the unnecessary boolean literal. |
| Game.java | | 🔴 Merge this if statement with the enclosing one. [+1 location] |
| Game.java | | 🔴 Replace this use of System.out or System.err by a logger. |
| Game.java | | 🔴 Replace this use of System.out or System.err by a logger. |
| Game.java | | 🔴 Replace this use of System.out or System.err by a logger. |
| Snake.java | | 🟡 The return type of this method should be an interface such as "List" rather than the implementation. |
| Snake.java | | 🟡 The type of "snakePartList" should be an interface such as "List" rather than the implementation. |
| Snake.java | | 🔴 Replace this use of System.out or System.err by a logger. |
| Snake.java | | 🔴 Replace this use of System.out or System.err by a logger. |

5 files of project eedd-snake-game-master (at 20/06/2022 08:17)

Variables View:

| Name | Value |
|-------------------|----------------------------|
| update() returned | (No explicit return value) |
| args | String[] (id=18) |
| initPos | Cell (id=20) |
| initSnake | Snake (id=23) |
| board | Board (id=25) |
| newGame | Game (id=27) |
| i | 4 |