COMP250: Programming Assignment 2

1. You must follow these specifications:
    *   You should have ONLY one Java file: `SnakeGame.java`
        *   Do not submit entire project folder
        *   You may use compress the file. I will accept only ZIP.
        *   You must extend **SnakeGame.java** provided from instructor.
    *   If your code has errors, you may still submit the code with an explanation in the comments. Include:
        *   A very brief summary of what you did
        *   A list of any problems still in your code or anything that you didn't complete.
    *   You are not allowed to share code with your classmates nor allowed to use code from the internet. You are encouraged engage in high level discussions with your classmates.

    *   You must submit on the due date. Assignments submitted late are subject to a 10% penalty per day late. I will not accept submissions after 5 days (I will assign a grade of 0 at that point).
        *   100% midnight by Monday 19th
        *   90% midnight by Tuesday 20th
        *   80% midnight by Wednesday 21st
        Thanksgiving – 22nd
        *   70% midnight by Friday 23rd
        *   60% midnight by Saturday 24th
        *   50% midnight by Sunday 25th
    *   Extensions will be handled on an individual basis, but are typically reserved for special circumstances. **The earlier you talk to me, the better your chances of receiving one. Do not expect to get an extension when requesting on the due date**. **I will not grant extensions after the due date**.

Snake Game

Step0. Open your IDE and create a new project (e.g., Assignment2 or SnakeGame)
Step1. Download `SnakeGame.java` from BlackBoard.
Step2. Move the file to the appropriate folder (or directory).
Step3. Run `SnakeGame.java`. It should work with no errors. If not, ask for help.

Things to implement (Demo, detailed explanation, Q&A - in class. Video file is posted on BB)

Feature1 (25 points). More food pellets (currently only 1). You must use `java.util.LinkedList`

Feature2 (25 points). A list of poison pellets, which will kill the snake when eaten. Poison should move whenever the snake eats food. Use a different color than food or snake. You must use `java.util.LinkedList`

Feature3 (25 points). The snake should die when it bumps into itself.

Feature4 (20 points). When the snake grows, move the snake faster.

Feature5 (5 points). When the snake eats 20 pellets, the player wins the game (with "You won" message)

Extra points (Video file is posted on BB)
Feature6 (20 points). A list of food should chase the snake

Feature7 (20 points). A list of poison comes from a list of food