## **Game Intro**

This is a java game that a user can play with a computer on Eclipse, by typing instructions on command line.

Consider an electronic world consisting of a 10x10 grid. Virtual "organisms" can exist on this grid, with an organism able to occupy a cell on the grid. Organisms have energy that can be gained or lost in a variety of ways. When an organism runs out of energy it dies, and vacates the cell it formerly occupied. An organism can have at most M units of energy. An organism may do one of several things during a virtual time cycle:

- Move one cell horizontally or vertically in any direction.
- Stay put and do nothing
- Reproduce

All move takes energy. The goal of the game is to compete with the computer to survive in the end.

## Here is the User Interface:

What is the name of your human player?
A Human
What is the name of your computer player?
A computer

First, enter the name of your human player and computer player.

-----Print Configurations: You are competing The energy consumed in staying put: 1 Energy consumed when moving or producing: 13 with the computer. Food energy per unit: 107 The maximum energy per organisms: 587 The game The maximum food units per cell: 42 configurations are printed for you.  $0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9$ Try to let as many organisms survive 2[][][][][][][][][][][] as possible. 3[][][][][][][][][][][][] Follow the command line to continue the game. Round: 1 Organism on row 1, col 3 (0-indexed): The food situations are (west, east, north, south): false, false, false, false The organism situations are (west, east, north, south), -1, -1, -1, -1 The amount of remaining food on the organism's current cell: 0 The amount of energy currently possessed by the organism: 500 Where do you want your organism to move? Enter 0 to indicate stayput; 1-4(west, east, north, sorth) to indicate move; 5 to indicate reproduce. 1 Enter 0 to indicate stayput; 1-4(west, east, north, sorth) to indicate move; 5 to indicate reproduce. Moving West.... Organism on row 1, col 5 (0-indexed): Reproducing.... Results of this turn: After you move, the 0 1 2 3 4 5 6 7 8 9 computer and its 0 [ ] [ ] [ 1 ] [ ] [ ] [ ] [ ] [ ] [ ] children will move automatically. Then the results of this turn will print out on the screen. 9 [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] A Human total energy: 487, count: 1 A computer total energy: 486, count: 2