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Programming Language used: Java 8 Software Required: JDK 11, JRE 11

Commands to execute:

Note: Go to the code folder <optionalAssignment2_code_dxs8730/ PosteriorProbability> on to the terminal. The folder should contain compute_a_posteriori.java file.

Compile command: javac compute_a_posteriori.java

After compiling, it should generate class file such as compute_a_posteriori.class (main class).

Execute command: java compute_a_posteriori <input>

Execute command Example: java compute_a_posteriori

Note: this will generate result.txt in the folder <optionalAssignment2_code_dxs8730/ PosteriorProbability>

The Code is Structured as follows:

The code contains initial probability p(h1), p(h2), p(h3), p(h4), p(h5) and the probability values for lime and cherry candies in all 5 bags.

P(hi) is calculated and overridden in a loop based on the formula Pt (hi) = P(Qt | hi) * Pt-1 (hi) / Pt-1 (Qt)

Sample Execution: