**CS318 – Project 04 – Dorothy and Emeralds**

*Due Date is posted on Blackboard.*

**Project Description:**

One day Dorothy was wandering down the Yellow Brick Road and suddenly found **N** baskets containing emeralds. Each basket contains an initial number of emeralds, **E**.

Dorothy picks up a basket and empties the emeralds, **E**, onto the ground. Each time Dorothy empties a basket, Glinda (the good witch) appears and fills the same basket with the **floor of [E/2]** emeralds.

Glinda gives Dorothy a number of **minutes** to collect as many emeralds as she can. In a single minute, Dorothy can take all the emeralds in a basket, regardless of the number of emeralds in it.

Find the **maximum number of emeralds** Dorothy can collect in the given number of minutes.

**Requirement:**

Find the most efficient way to do this problem. You will be graded on the conciseness, organization, readability and efficiency of your solution.

**Sample Run:**

