HW #3

Homework exercises should be done individually (You should write the solution by yourself). Solutions must be prepared in python programming language and submitted electronically before **11.59 pm on Sunday, December 18**. No credit will be given to solutions obtained verbatim from the Internet or other sources. **To get full credit for each question, you need to provide a brief explanation of your codes and the efficiency analysis with comments.**

1. Suppose there are a skyscraper with N floors and M identical snooker balls such that a snooker ball will break if it is dropped from a specific floor F, but it will not break if it is dropped from the floor (F – 1). Note that the broken balls cannot be reused.

Devise a dynamic programming algorithm that takes the values N and M as input, and outputs the minimum number of ball dropping required to determine the specific floor F.