#### Assignment 8 – Simulate some parts of Manufactoria - 10 points

#### **Purpose**

Manufactoria is a logic game that engineers love. Try playing it if you want, but you don't have to.

For this assignment, you will add to code that I provide (manufactoria.py) to simulate the game of Manufactoria to solve two different problems. The strings to be simulated will consist of some combination of reds ("r") and blues ("b"). For example, the string "brbb" represents the following sequence of colors: blue, red, blue, blue.

You will write 3 functions: three\_blues(), same\_amount\_of\_both() and all\_one\_color() that take an input string and do the following:

three\_blues() will return True if the input string contains exactly 3 blues. Otherwise, it will return False. For example, "brrbbr" as input will cause the function to return True but "rbbrrrrr" as input will cause the function to return False.

same\_amount\_of\_both() will return True if the input string has the same number of reds and blue. It will return False otherwise.

all\_one\_color() will return True if the input string has all reds or all blues. It will return False otherwise.

## **Required Python Comment**

Place a Python comment at the top of your submission that is formatted as follows.

## **Other Requirements**

## **Submittal details**

- Due Date: Wednesday, November 13th no later than 11:59 p.m.
- Partner Information: Everyone must complete this assignment individually.
- Submission Instructions: Upload your solution, entitled **YourFirstName-YourLastName-Assignment8.py** to the BrightSpace Assignment 8 Dropbox.

• Deadline Reminder: You will not be able to submit after the due date/time.

# Grading Rubric

- 1 point Comment at top of source file
- 3 points for each of the 3 functions produce the proper test pass/fail to the test method