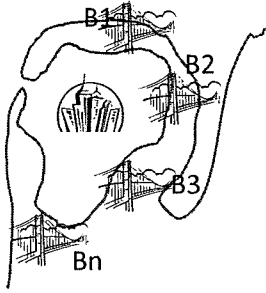


(20pts) Answer the 5 multiple choice questions online. Log it ERNIE, click on the class, then Exams.

Problem: Can Gotham City be saved?



Gotham city (which majority is on an island) is under attack and batman is on vacation. You are the next super hero on the list! Your ability to create invisible bridges instantaneously, allowing a good amount of people to escape, is in need!

Build a program that allows you to test the number of bridges needed. By entering the number of bridges total, let MATLAB generate the amount of people that will escape using each bridge. Enter the amount of people stuck on the island, and conclude on whether that amount of bridge will be enough.

Requirements for the program (not necessarily in order) – Whatever is not indicated is up to you (within taught limits..)!

- Prompt the super hero how many bridges instantaneously appear. Trap when invalid (even superheroes make mistakes)
- Prompt how many people are stuck on the island. Also trap when invalid.
- Using a loop, generate a 2 dimensional table of data:
 - o The first column should have the bridge's number.
 - o The second column should have the number of people that escape using that bridge: generate a random integer value between 30,000 and 50,000 each time.
 - o The third column should be the amount of people left to escape after that bridge appears.
- Display the table properly, with headers.
- What was the average number of people that escaped per bridge?
- Conclude: Will everyone be saved??

For example:

Assuming the following givens: 3 bridges and 100,000 people need to escape.

Solve:

Assume Bridge1 allows 10,000 people to escape, then we have 90,000 left.

Assume Bridge2 allows 40,000 people to escape, then we have 50,000 left.

Assume Bridge3 allows 50,300 people to escape, then we have -300 left.

The average amount of people per bridge is $(10,000+40,000+50,300)/3 = 33,433.33$. (Realistically 33,433)

All people got saved!

Step 7a) 7b) 7c) are to be in the script file. Submit script file before the timed deadline.

Rubric for Script file:

Intro	5pts	Prompts	5pts
Clean up	5pts	Loops Validity	5pts
Comments/algorithm	5pts	Loop	5pts
Spacing	5pts	Column1	5pts
Indentation	5pts	Column2	5pts
		Column3	5pts
		Display headers/table	5pts
		Average	5pts
		Conclusion	5pts
		Testing	5pts
		Other	5pts