APCS CW 4-9 (Multiplication Table)Name:

Block: Seat:

- 1. Let grid be a 2D array of String.
 - (a) What java statement would you use to find the number of rows in grid?
 - (b) What java statement would you use to fin the number of columns in grid?
 - (c) What java statement would you use to get the String stored in the third row of the first column of grid?
- 2. Let board be a 2D array of boolean.
 - (a) What Java code snippet would declare board?

(b) What Java code would initialize board so that all elements are true?

(c) Recall on homework problem #15 (from November 15, 2023) you made checkerboard pattern by adding the row and column and if it is even the color of the square is dark, and if it is odd it is light. Change board so that it follows the same pattern, only set it to false or true instead of dark or light.

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- 3. Make the class MultiplicationTable which has the follwing:
 - (a) A single instance variable called table that will contain any desired number n rows and m columns of int
 - (b) A constructor that takes two parameters that specifies how many rows and columns that the table should have. (Remember the constructor should initialize the instance variable). Initialize the table so each element contains the product of its row index and its column index.
 - (c) A method that returns the number of rows in the table
 - (d) A method that returns the number of columns
 - (e) A toString method the prints the table so that each row is on its own line, and there is a "—" between the columns.