Northern Michigan University (Marquette Co, MI)
CS 345-01-26W: Android Programming

Program 2
Due: Friday 13 February 2026 1:00 P.M. EST

Create a folder called "PG2" in the top level of your CS345-01-26W folder Copy your ENTIRE Android project folder into PG2. Place a (possibly empty) file called "DONE" into PG2 when you are ready to have your programs graded.

Write the following program in XML and Kotlin for Android. Do not use any drag-and-drop graphical objects in your code. Write this program using only text (XML and Kotlin):

Mastermind is a classic game I played as a boy. The computer begins by selecting a random 4-digit number. It is totally acceptable for there to be repeated digits. Any random 4-digit combination works.

The human player will guess 4-digit numbers. After each guess, the computer will give two statistics: the number of correct digits in the correct place, and the number of correct digits in the wrong place.

For example, if the random number is 1234, and the player guesses 4253, the computer rates that the player has one digit in the correct place (the 2) and two digits in the wrong place (the 3 and the 4).

The computer does not reveal WHICH digits are right. It only reveals the NUMBER of digits in each category.

Guess: 4253
1 correct digit in correct position. 2 correct digits in incorrect position.

Guess: 3333
1 correct digit in correct position. (Notice that the other 3's don't count as being in the wrong place. You should note the digits in the correct place first. Then worry about the incorrect digits.)

Guess: 5678
No correct digits.

Guess: 5671
1 correct digit in incorrect position.

And so forth, and so on.

Eventually, the player will guess the correct answer, and the program should indicate how many guesses it took.