

CSCI 1990 Assignment 7 Fall 2009

Due Tuesday November 23

Write a Java program that generates the number of Megamillions lottery tickets requested by a customer.

Megamillions is a game in which the winner chooses 5 different integers in the range 1 to 56 and a Mega Ball which is an integer in the range 1 to 46.

Define an array of integers of size 57 called, say, num.

After declaring the variables, ask the user how many tickets they want to buy. Call that value **n**.

Then use a **for** loop that goes from 1 to n, do the following:

In another **for** loop where *i* goes from 1 to 57, set num[*i*] equal to 0. (We'll let num[*i*] equal how many times the number *i* has been picked – remember that there can't be duplicates in the 5 numbers, so we have to keep track of which numbers have already been picked and which haven't.)

You'll need to have a **counter** to keep track of how many numbers have been picked, so initialize it to 0.

Then **while** the counter is less than 5, generate a random integer called **nextPick** between 1 and 56. If num[nextPick] equals 0, that means it hasn't already been picked, so print the number, and add 1 to the counter to keep track of that fact that one more number has been picked. After the "if" statement add 1 to num[nextPick] so it won't be picked again.

When you exit the **while** loop, you'll have the 5 numbers.

Then to get the Mega Ball, just generate a random integer between 1 and 46 and output it.