Exam 2 is on Tuesday, December 8.

**Logistics:**

1. You will receive the exam in mail at 12:00 noon (Bryn Mawr Time/US Eastern) on Tuesday, December 8.
2. The exam will be due Exactly twelve hours later by mail to dkumar@cs.brynmawr.edu by 11:59p on December 8, 2020.
3. If there are any quick questions, I will host open office hours from 2:30p to 4:00p on Tuesday, December 8. Please use the class Zoom link to get in.
4. Once you receive the exam there will be NO accommodations about it.
public class Country

    public Country(String abbrev, String name, String capital) – Constructor

    public String getISO() – Return the 3-letter ISO abbreviation

    public String getName() – Returns the name of the country

    public String getCapital() – Returns the name of the capital

    public String toString() – prints out the object in the format:
        “KAZ Kazakhstan (Astana)”

    public static void main(String[] args) {
        Country usa = new Country(“USA”, “United States”, “Washington”);
        StdOut.println(usa);
    } // main()

    // read in data
    In infile = new In(“countries.csv”);

    int n = Integer.parseInt(infile.readLine()); // read number of entries in data file

    Country[] countries = new Country[n]; // Create array of size, n

    for (int i=0; i < n; i++) { // Read from file, one line at a time
        String s = infile.readLine(); // Split the line (it is a comma separated file)
        String[] fields = s.split(“,”); // Extract the relevant fields

        String abbrev3 = fields[2];
        String name = fields[3];
        String capital = fields[4]; // Create and store
        countries[i] = new Country(abbrev3, name, capital);
    }

    for (int i=0; i < countries.length; i++) // Print out the data
        StdOut.println(countries[i]);
public class Capitals {
    public static void main(String[] args) {
        // Read the data
        In in = new In("countries.csv");
        int n = Integer.parseInt(in.readLine());
        Country[] countries = new Country[n];
        for (int i = 0; i < countries.length; i++) {
            //
        }
        // Play the guessing game
        System.out.printf("Greetings!\n");
        System.out.printf("Lets play a game...\n");
        System.out.printf("I will give you the name of a country and you will have to guess its capital\n");
        System.out.println("OK, here we go...\n");
        boolean gameOver = false;
        // Keeping scores...
        int score = 0;
        int nQuestions = 0;
        // The game loop
        while (!gameOver) {
            // Pick a country
            // Ask for its capital
            // Inform about the result and keep score
            // Play again?
        }
        // Done...
        System.out.println("\nYour score:\n");
        System.out.printf("You got %d correct out of %d questions.\n", score, nQuestions);
        System.out.println("Good game!\n");
    } // main()
} // Capitals
public class Capitals {
  public static void main(String[] args) {
    // Read the data
    In in = new In("countries.csv");
    int n = Integer.parseInt(in.readLine());
    Country[] countries = new Country[n];
    for (int i = 0; i < countries.length; i++) {
      String s = in.readLine();
      // StdOut.println(s);
      String[] fields = s.split(",");
      String abbrev3 = fields[2];
      String name = fields[3];
      String capital = fields[4];
      countries[i] = new Country(abbrev3, name, capital);
    }
    // Play the guessing game
    System.out.printf("Greetings!\n");
    System.out.printf("Lets play a game...\n");
    System.out.printf("I will give you the name of a country and you will have to guess its capital\n");
    System.out.println("OK, here we go...\n");
    boolean gameOver = false;
    int score = 0;
    int nQuestions = 0;
    while (!gameOver) {
      // Pick a country
      Country c = countries[(int) (Math.random() * countries.length)];
      // Ask for its capital
      System.out.printf("What is the capital of %s? ", c.getName());
      String answer = StdIn.readString();
      nQuestions++;
      // Inform about the result and keep score
      if (answer.toLowerCase().equals(c.getCapital().toLowerCase())) {
        System.out.printf("You are correct!\n");
        System.out.printf("The capital of %s is indeed \n", c.getName(), answer);
        score++;
      } else {
        System.out.printf("Sorry, that is not correct!\n");
        System.out.printf("The capital of %s is %s.\n", c.getName(), c.getCapital());
      }
      // Play again?
      System.out.printf("\nPlay again? ");
      answer = StdIn.readString();
      if (answer.toLowerCase().equals("no"))
        gameOver = true;
    }
    System.out.printf("\nYour score:\n");
    System.out.printf("You got %d correct out of %d questions.\n", score, nQuestions);
    System.out.println("Good game!\n");
  } // main()
} // Capitals