

Chapter 8 Program Challenge- ArrayList

Driver's License Exam

- The local Driver's License Office has asked you to write a program that grades the written portion of the driver's license exam. The exam has 20 multiple-choice questions.

Here are the correct answers:

1. B	6. A	11. B	16. C
2. D	7. B	12. C	17. C
3. A	8. A	13. D	18. B
4. A	9. C	14. A	19. D
5. C	10. D	15. D	20. A

- A student must correctly answer 15 of the 20 questions to pass the exam.

Create a new Java project called Your_Name_Drivers_Exam and write a class named DriverExam that, ***at a minimum***, has the following private fields:

- A private ArrayList that will eventually hold the correct answers to the exam. Do not fill the ArrayList with the answers right now. The user will enter the answer key when the program is actually running.
- A private ArrayList that holds the student's answers when they are entered into the program.
- The class should have the following public methods:
 - A constructor that will initialize any variables that will be used in the class.
 - passed()- It returns true if the student passed the exam, or false if the student failed.
 - totalCorrect()- Returns the total number of correctly answered questions.
 - totalIncorrect()- Returns the total number of incorrectly answered questions.
 - questionsMissed()- An integer ArrayList containing the numbers of the that the student missed.
- Demonstrate the class in a complete program that does the following:
 - Asks the user to enter the correct answers for the exam using console and stores them in the appropriate ArrayList.
 - Asks the user to enter a student's test answers using console.
 - Displays the results returned from the DriverExam class's methods.
 - Total correct answers, total incorrect answers, question #'s missed.
- Input Validation: Only accept the letters A, B, C, or D as answers.