

## ITSE 2321 – OBJECT-ORIENTED PROGRAMMING JAVA

### Program 7 – Methods: A Deeper Look

Write a program that will help an elementary school student learn multiplication. Use a *SecureRandom* object to produce two positive one-digit integers. The program should then prompt the student with a question, such as:

How much is 6 times 7?

The student then inputs the answer. Next, the program checks the student's answer. If it's correct, display a message from the *possible responses to a correct answer* below, and ask another multiplication question. If the answer is wrong, display a message from the *possible responses to an incorrect answer below*, and let the student try the same question repeatedly until the student finally gets it right.

A separate method should be used to generate each new question. This method should be called once when the application begins execution and each time the student answers the question correctly. After the student gets five questions correctly, give him/her the opportunity to exit the program. The student might choose to continue, but after every correct answer thereafter, give him/her another opportunity to exit the program.

Possible responses to a correct answer: (Selected at random)

Excellent!  
Very good!  
Nice work!  
Way to go!  
Keep up the good work!

Possible responses to an incorrect answer: (Selected at random)

That is incorrect!  
No. Please try again!  
Wrong, Try once more!  
No. Don't give up!  
No. Keep trying!

**No input, processing or output should happen in the main method. All work should be delegated to other non-static methods.** Include the recommended minimum documentation for each method. See the program one template for more details.

Run your program and copy and paste the output to a file. Create a folder named, **fullname\_program7**. Copy your source code and the output file to the folder. Zip the folder and upload it to Blackboard.