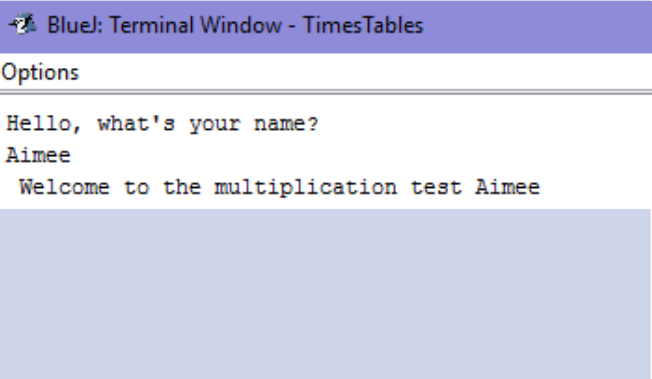
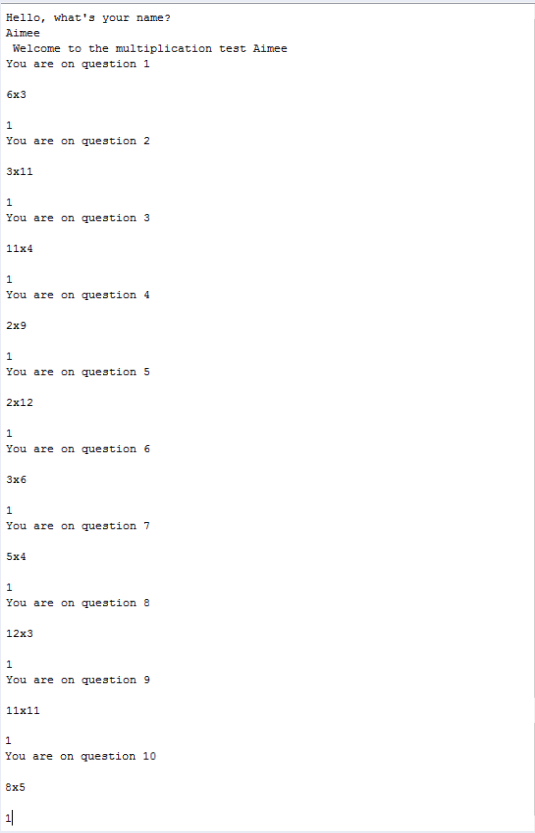
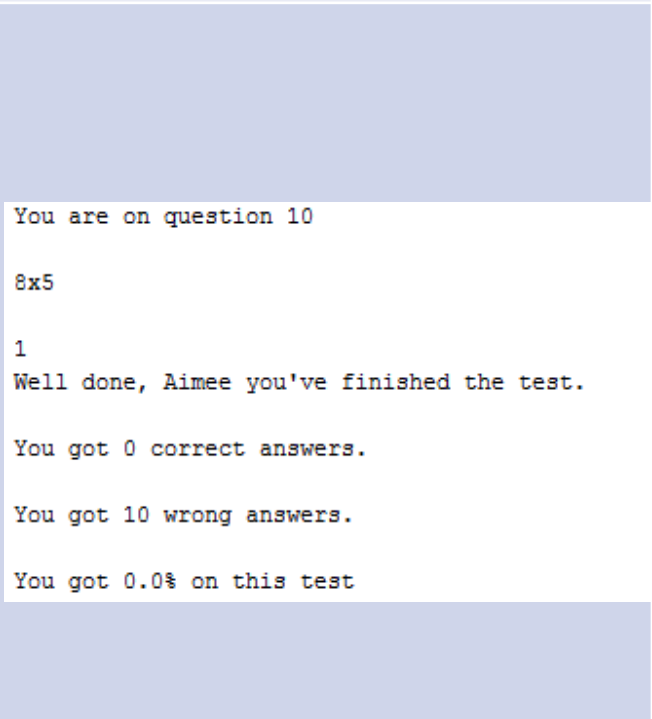
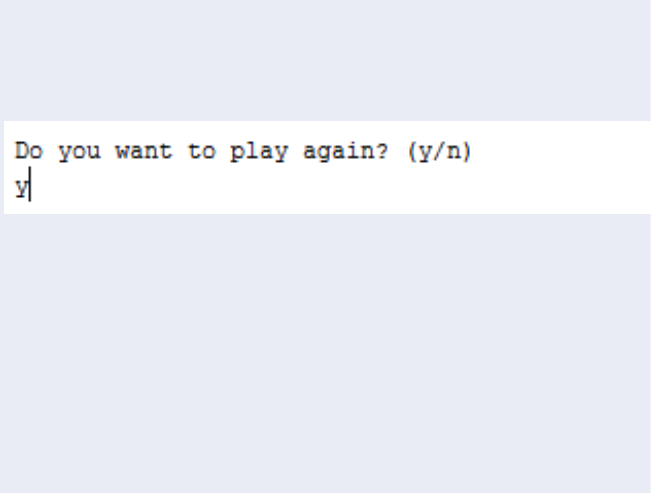
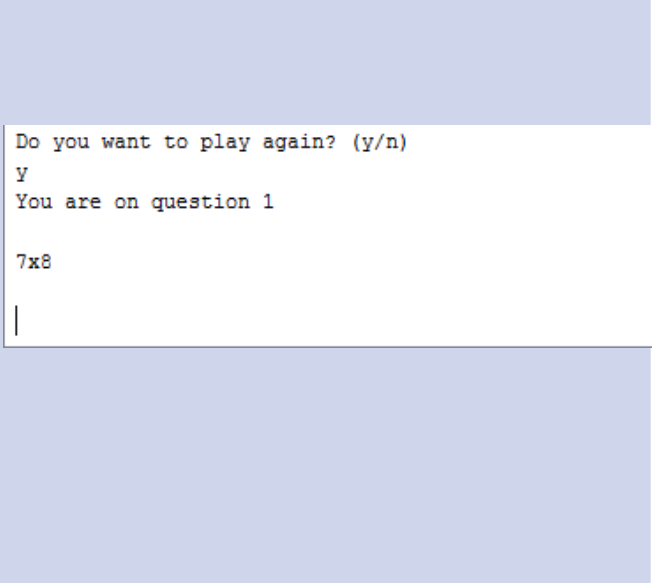
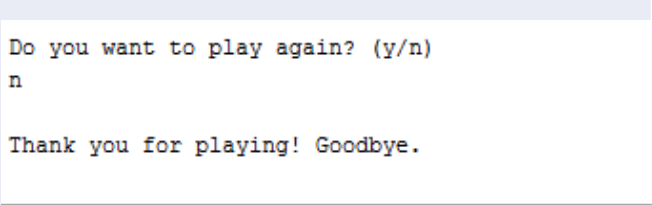
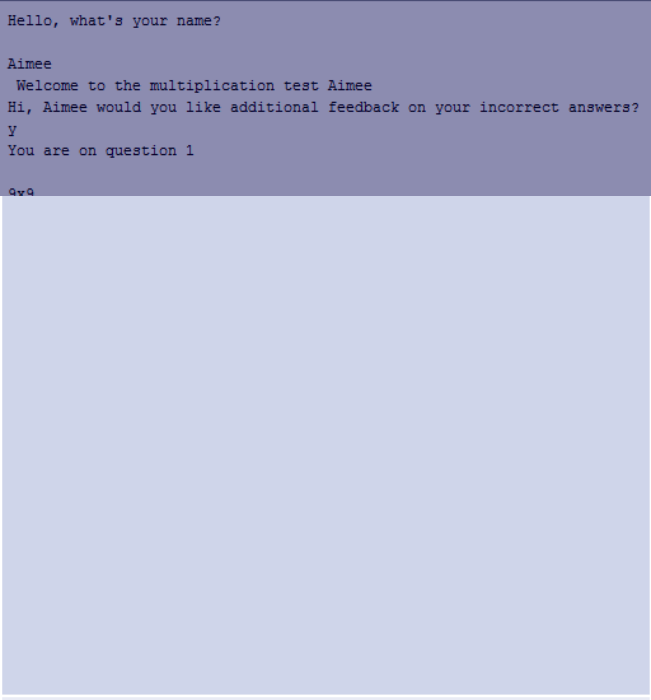
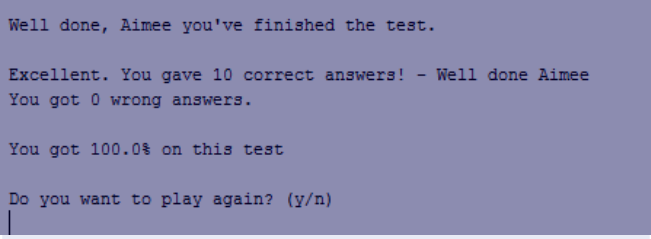
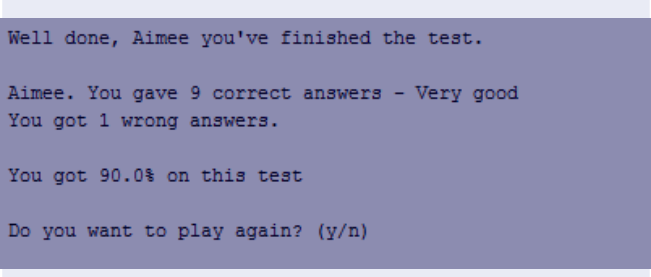
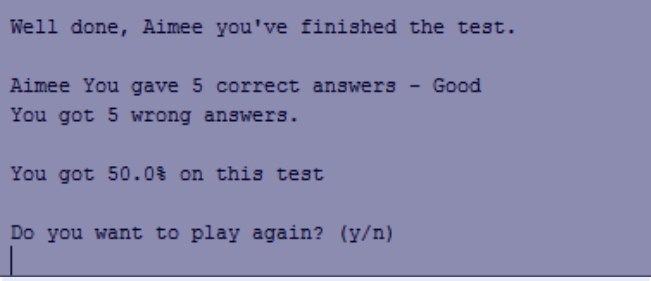
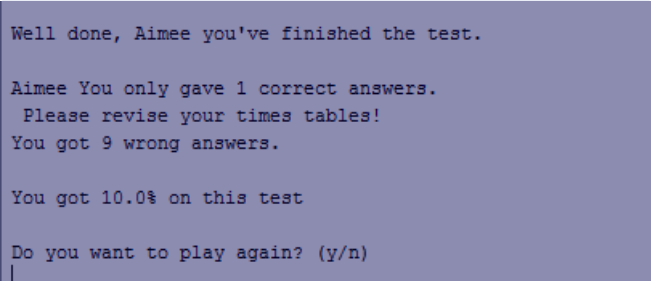
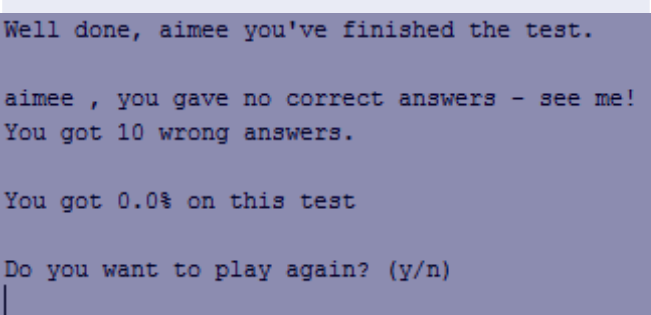


What should happen?	Why? (Actions completed that will make this happen)	What actually happens?	Changes needed?	Screenshots
Program asks user to enter their name	Java.util.Scanner was imported at the start of the code, and a new instance of the scanner was created to store the users entry	Upon startup the user is asked to enter their name, this name is then stored to be used later in the game and displayed at the start with a greeting message.	None	
Asks the user 10 random questions, using numbers 2-12 (inclusive)	Using the ThreadLocalRandom function I was able to generate a random number between 2 and 12, quickly and easily. This function is then applied to two integer variables – randomOne and randomTwo to complete the multiplication questions and make sure they are random. 10 questions were displayed using a do while loop.	10 questions are displayed, each with different numbers each time (the numbers for the questions are always between 2 and 12)	None	
Tells the user their score	By using an if statement to decide whether the user got a question wrong or right and tallying up the total for each. As the number of correct and incorrect answers are stored they can be displayed at the end along with a formula that works out the percentage they got correct.	The user is informed of the number of correct and incorrect answers they got, in a full sentence, along with the percent of correct answers, at the end of the test.	None	
User asked if they want to play again and asked to enter a value	Java.util.Scanner was imported at the start of the code, and a new instance of the scanner was created to store the users entry after the message asking if they want to play again is displayed.	A message appears after the scores are displayed asking if the user wants to play again. It is possible for the user to type in an answer.	None	
If the user chooses to play again – go back to the start	A while loop is used to test if the user wants to play again. This is done by the user entering a specific value – “y”. If this is the case the game will run again starting from the questions (not where the user enters their name)	After the scores are displayed, the user is asked if they want to play again. Upon entering “y” or “Y” for yes, the user is given a new set of 10 questions to answer. The user can enter Y in any case due to the ignorecase expression.	None	
If the user chooses to end – the game quits	A while loop is used to test if the user wants to play again. This is done by the user entering a specific value – “n”. If this is the case a goodbye message is displayed.	After the scores are displayed, the user is asked if they want to play again. Upon entering “n” or “N” a goodbye message is displayed. The user can enter N in upper or lower case due to ignorecase expression	None	

What should happen?	Why? (Actions completed that will make this happen)	What actually happens?	Changes needed?	Screenshots
The user is asked whether they want feedback on incorrect answers – feedback (being the correct answer) is given straight away after completion of each question	The user is asked before the game begins, whether they want to receive feedback and a new string variable was created and that will allow the user to enter a value. The variable was “feedback”. If “feedback” matches “y” or “Y” then the system will immediately respond by outputting the correct answer.	The do you want to play again message is displayed and if the user chooses yes, each correct answer is displayed immediately. If the user chooses no, then no correct answers are displayed and the system moves onto the next question after the users entry.	None	 <p>Hello, what's your name?</p> <p>Aimee</p> <p>Welcome to the multiplication test Aimee</p> <p>Hi, Aimee would you like additional feedback on your incorrect answers?</p> <p>y</p> <p>You are on question 1</p> <p>Qx9</p>
The user gets a different feedback sentence at the end of the game depending on their score	By using if, if else and else statements a message that corresponds to the users score will be displayed.	At the end of the quiz, after the user is informed of how many corrctect and incorrect questions they gave, another sentence is displayed. This sentence matches their score and they get a different sentence for the scores 0, 1-4,5-8,9 and 10.	None	 <p>Well done, Aimee you've finished the test.</p> <p>Excellent. You gave 10 correct answers! - Well done Aimee</p> <p>You got 0 wrong answers.</p> <p>You got 100.0% on this test</p> <p>Do you want to play again? (y/n)</p> <p> </p>  <p>Well done, Aimee you've finished the test.</p> <p>Aimee. You gave 9 correct answers - Very good</p> <p>You got 1 wrong answers.</p> <p>You got 90.0% on this test</p> <p>Do you want to play again? (y/n)</p>  <p>Well done, Aimee you've finished the test.</p> <p>Aimee You gave 5 correct answers - Good</p> <p>You got 5 wrong answers.</p> <p>You got 50.0% on this test</p> <p>Do you want to play again? (y/n)</p> <p> </p>  <p>Well done, Aimee you've finished the test.</p> <p>Aimee You only gave 1 correct answers.</p> <p>Please revise your times tables!</p> <p>You got 9 wrong answers.</p> <p>You got 10.0% on this test</p> <p>Do you want to play again? (y/n)</p> <p> </p>  <p>Well done, aimee you've finished the test.</p> <p>aimee , you gave no correct answers - see me!</p> <p>You got 10 wrong answers.</p> <p>You got 0.0% on this test</p> <p>Do you want to play again? (y/n)</p> <p> </p>

What should happen?	Why? (Actions completed that will make this happen)	What actually happens?	Changes needed?	Screenshots
This is a modified version of versionTwo which allows a random number to be generated by using an external class – CustomRandomNumber This should be numbers 1-12	I created two instances of the class CustomRandomNumber and using the method getRandomInteger was able to generate random numbers and assign them to the variables that are used to ask and calculate the questions.	The game continues to be fully functional and a random integer between 1 and 12 is generated for the questions.	The code that tells the user what questions they are on is not displayed. This was edited to be shown as in previous versions.	<div><div>BlueJ: Terminal Window - TimesTables</div><div>Options</div><div>1 Sorry, Aimee.That's wrong. The correct answer was 5 9x2 1 Sorry, Aimee.That's wrong. The correct answer was 18 9x7 1 Sorry, Aimee.That's wrong. The correct answer was 63 2x9 1 Sorry, Aimee.That's wrong. The correct answer was 18 6x1 1 Sorry, Aimee.That's wrong. The correct answer was 6 3x10 1 Sorry, Aimee.That's wrong. The correct answer was 30 10x7 1 Sorry, Aimee.That's wrong. The correct answer was 70 3x9 1 Sorry, Aimee.That's wrong. The correct answer was 27 Well done, Aimee you've finished the test. Aimee , you gave no correct answers - see me! You got 10 wrong answers. You got 0.0% on this test Do you want to play again? (y/n) </div></div> <div><div>BlueJ: Terminal Window - TimesTables</div><div>Options</div><div>Hello, what's your name? Aimee Welcome to the multiplication test Aimee Hi, Aimee would you like additional feedback on your incorrect answers? Y You are on question 1 3x7 21 Well done,Aimee that's correct You are on question 2 4x9 3 Sorry, Aimee.That's wrong. The correct answer was 36 You are on question 3 2x10 20 Well done,Aimee that's correct You are on question 4 4x9 2 Sorry, Aimee.That's wrong. The correct answer was 36 You are on question 5 9x5 1 Sorry, Aimee.That's wrong. The correct answer was 45 You are on question 6 8x9 9 Sorry, Aimee.That's wrong. The correct answer was 72 You are on question 7 2x9 18 Well done,Aimee that's correct You are on question 8 11x11 121 Well done,Aimee that's correct You are on question 9 8x4 1 Sorry, Aimee.That's wrong. The correct answer was 32 You are on question 10 6x5 1 Sorry, Aimee.That's wrong. The correct answer was 30 Well done, Aimee you've finished the test. Aimee You only gave 4 correct answers. Please revise your times tables! You got 6 wrong answers. You got 40.0% on this test Do you want to play again? (y/n) n Thank you for playing! Goodbye.</div></div>