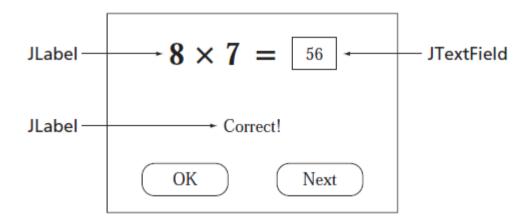
University of Dar Es Salaam, CoICT CS175 PROGRAMMING IN JAVA ASSIGNMENT 20 MARKS SUBMISSION DEADLINE DATE: 2<sup>nd</sup> July 2018, 1000hrs

## **Setup and Submission Instructions**

- Create a new folder named with your first initial and last name, for example "Henrick Mwasita" whose registration is 1988-10-00026 would name her folder "hmwasita\_1988-10-00026".
- In each class you implement, include the following field with your name:
- public static final String MYDETAILS = "Henrick Mwasita 1988-10-00026";
- Be sure to compile and test your code to ensure it works properly. However, you do not need to submit your test code.
- When you have completed the assignment, drag the entire folder into the DropBox (https://www.dropbox.com/request/6Kodg3hI4D4tulnRijAT).
- Contact a staff member if you have difficultly submitting your assignment solution or need clarification on the assignment description.

Write a TeachArithmeticFrame class that teaches children arithmetic. The frame uses a JLabel for a problem and a JTextField for the user answer. When the user presses the Enter key (while the JTextField object is active) or clicks the OK button, display a message stating whether the user's answer is correct. When the Next button is clicked, display a new problem. The numbers are limited to two digits.



Consider using a larger font for the JLabel and JTextField text. You can change the color of text by calling the setForeground method, for example.

questionLbl.setForeground(Color.red);

Define a helper class that generates problems.

The TeachArithmeticFrame class should keep the numbers of correct and incorrect answers are kept. Display these two numbers somewhere on the frame. Add the third button labelled Reset. When this button is clicked, the counters for correct and incorrect answers are reset to zero.

IMPORTANT: You may use any available resources, except your fellow classmates. Plagiarism will not be tolerated. Students caught cheating, including set of similar solutions will be awarded 0 mark.