

Workshop 9 (No Demo Required)

Notes:

- i. Each task should be presented during the lab, demo worth 70% of the workshop marks and code uploading worth the other 30%.
- ii. Make sure you have all security and check measures in place (with proper use of Exceptional Handling where ever needed), like wrong data types etc.
- iii. Make your project in proper hierarchy; introduce proper class coherence in your project. Proper packages and **your project should be handled by only one main method which should be in a TesterClass.**
- iv. Given output structure is just for student to have a glimpse what the output can look, students are free to make the output better in any way.

Other inputs can be given during demo, so make sure you test your program properly.

Task 1: (JavaFX required)

Write an application which randomly generate two numbers and asks the user to perform addition, subtraction, multiplication and division on the two numbers. Use “Set” to store your answers. **Note:** Set doesn’t store the duplicates. Keep track of answers that user is providing and if the user enters the same answer for a questions then display a message “You already answer this, Try a different answer”

Following are some sample screen shots of the program. You can improve the output if you would like, for example you can highlight which questions are not correct as well.

Quiz Application

Two randomly generated numbers are: 5 and 6

What is addition of 5 and 6:

What is subtraction of 5 and 6:

What is multiplicaiotn of 5 and 6:

What is division of 5 and 6:

Number of Correcct Answers: 4

Number of Wrong Answers: 0

Would you like to try with two other different numbers?

Quiz Application

Two randomly generated numbers are: 5 and 6

What is addition of 5 and 6:

What is subtraction of 5 and 6:

What is multiplicaiotn of 5 and 6:

What is division of 5 and 6:

Number of Correcct Answers: 2

Number of Wronnd Answers: 2

Would you like to try with two other different numbers?

Task 2: (Design your own output for this you are free to use JavaFX or not)

Assume that 25 countries and their capitals are stored in a map. Your program should prompt the user to enter a state and should display the capital for the state.