**CHRIST (Deemed to be University)**

**Department of Computer Science**

**MSc – Artificial Intelligence and Machine Learning**

**Name:** Syed Mohammed Luqmaan (2448552)

**Course:** Java Lab

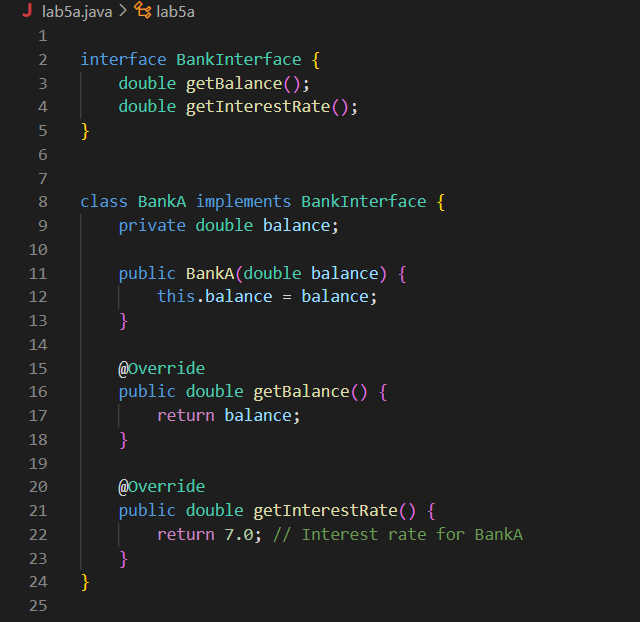
**Lab Experiment:** 5

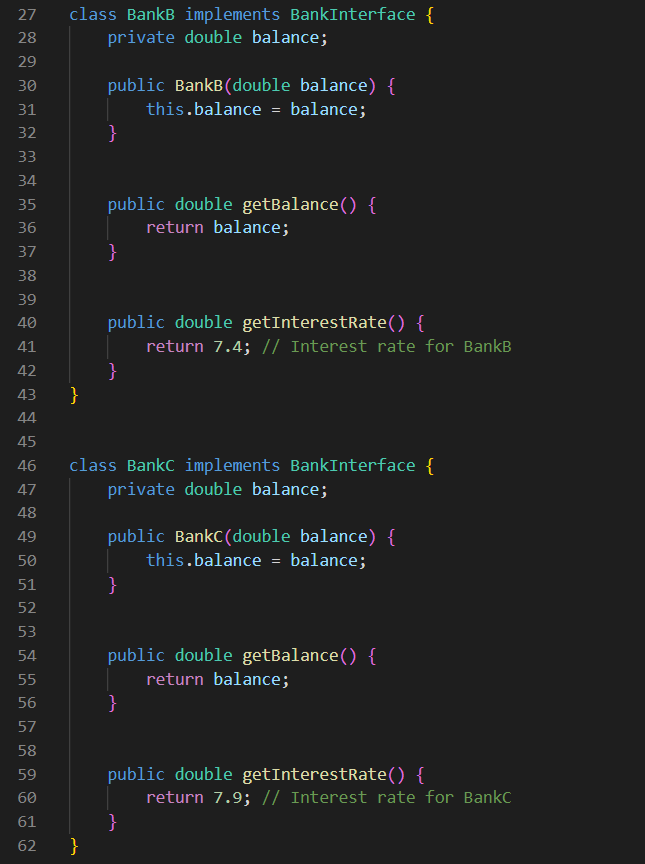
**DESCRIPTION:**

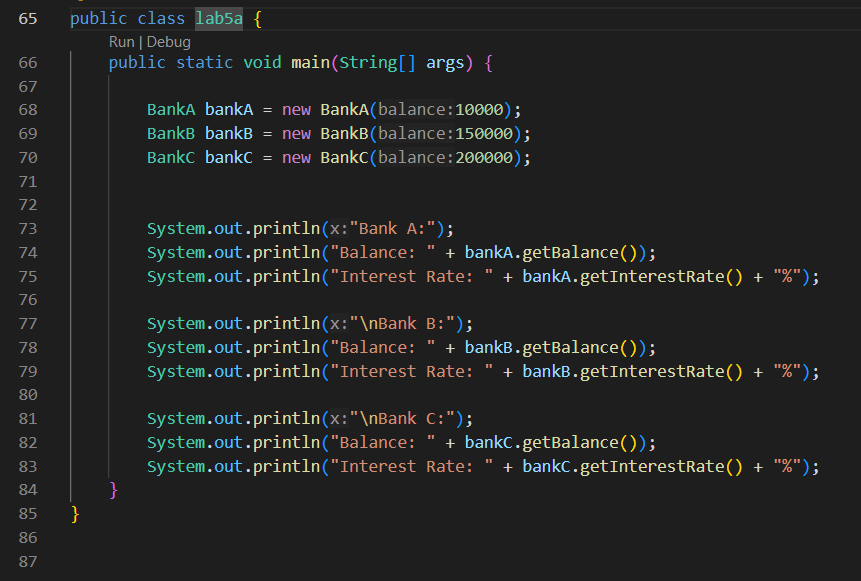
**5.a.**

**This program demonstrates the use of interfaces in Java by defining a BankInterface with methods getBalance and getInterestRate. Three bank classes (BankA, BankB, BankC) implement the interface, each with specific balances and interest rates. The main class creates objects of these banks and prints their balances and interest rates. It shows how different implementations can follow the same interface structure.**

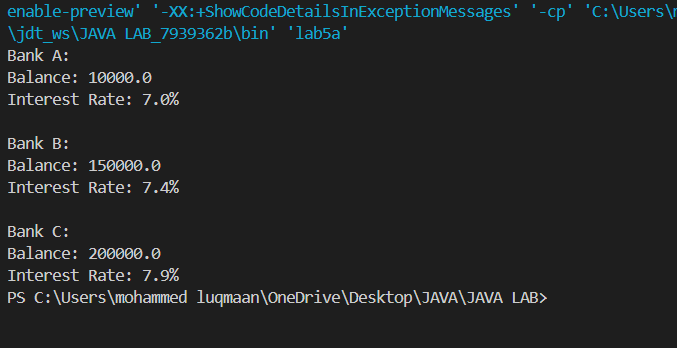
**Code screenshots:**

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**Output:**

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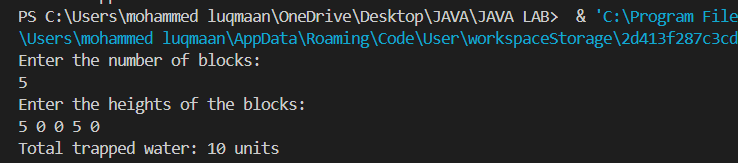
**5.b.**

**Description:**

**This Java program finds out how much water can get trapped between blocks of different heights after it rains. The user first enters the number of blocks and their heights. The program then calculates the total trapped water by checking the tallest blocks to the left and right of each block to see how much water can be stored above it.**

**The program is simple and runs quickly, even for a lot of blocks. It’s written in a way that’s easy for beginners to understand and shows how to solve a common problem using basic Java concepts.**

**Output:**

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