PL/SQL- HANDS-ON EXERCISE

Exercise 1: Control Structures

Scenario 1: The bank wants to apply a discount to loan interest rates for customers above 60 years old.

- **Question:** Write a PL/SQL block that loops through all customers, checks their age, and if they are above 60, apply a 1% discount to their current loan interest rates.

Scenario 2: A customer can be promoted to VIP status based on their balance.

- **Question:** Write a PL/SQL block that iterates through all customers and sets a flag IsVIP to TRUE for those with a balance over $10,000.

Scenario 3: The bank wants to send reminders to customers whose loans are due within the next 30 days.

- **Question:** Write a PL/SQL block that fetches all loans due in the next 30 days and prints a reminder message for each customer.

TABLE CREATION:

TABLE- CUSTOMERS

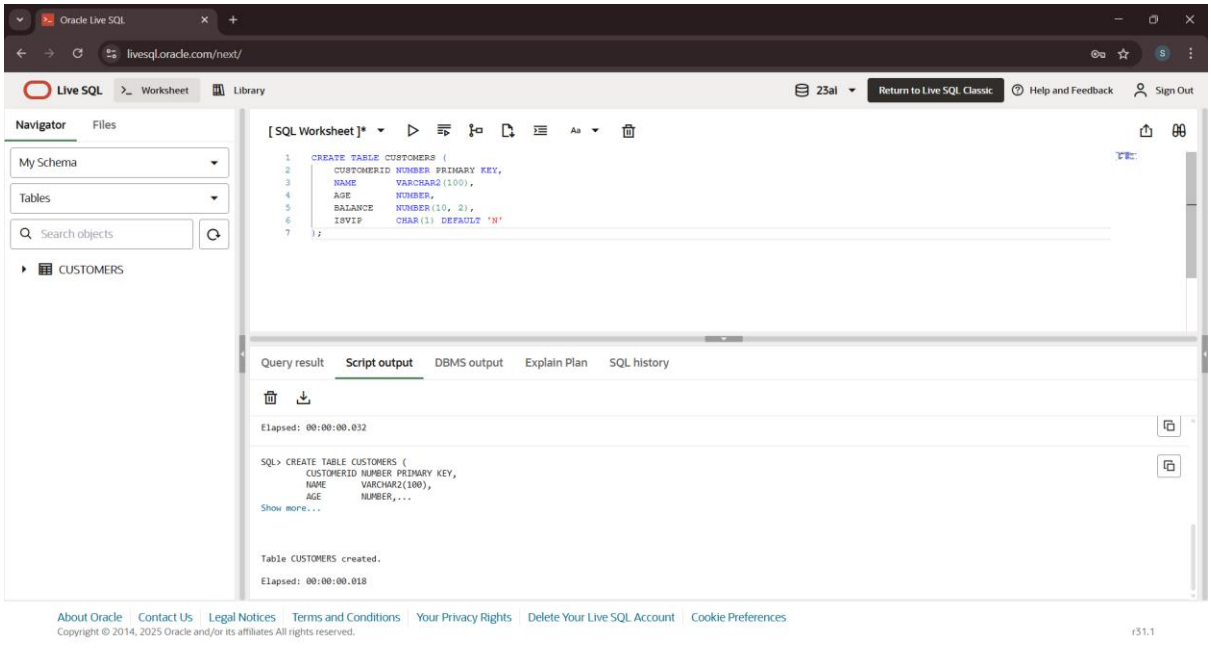
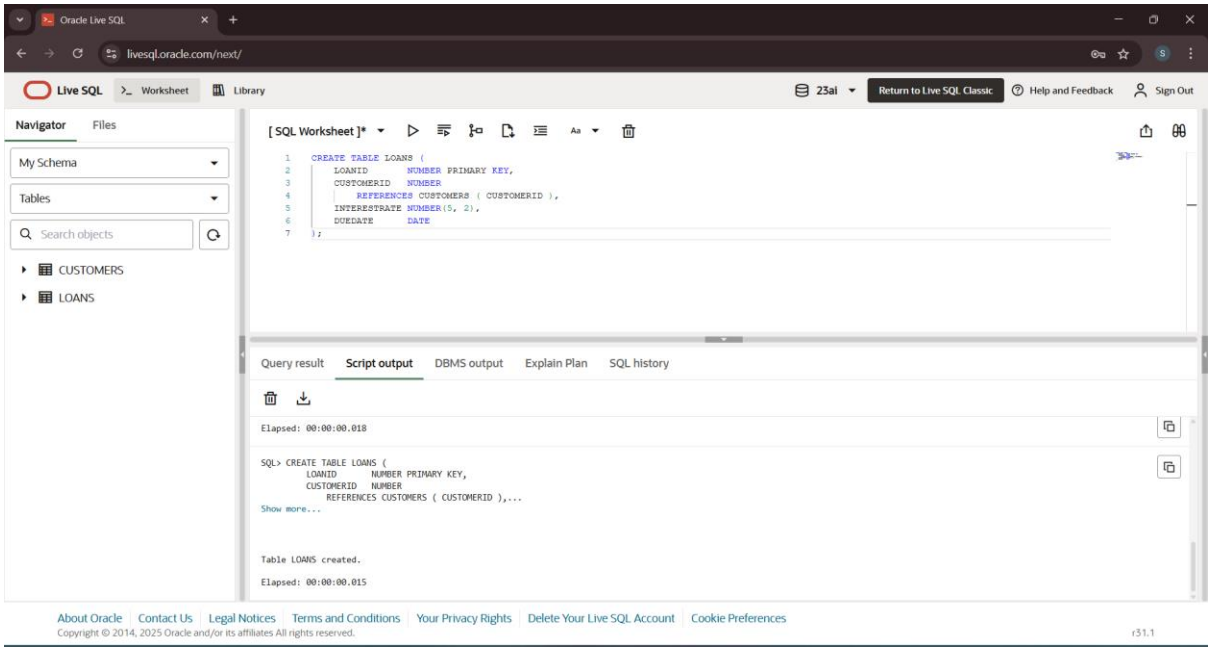
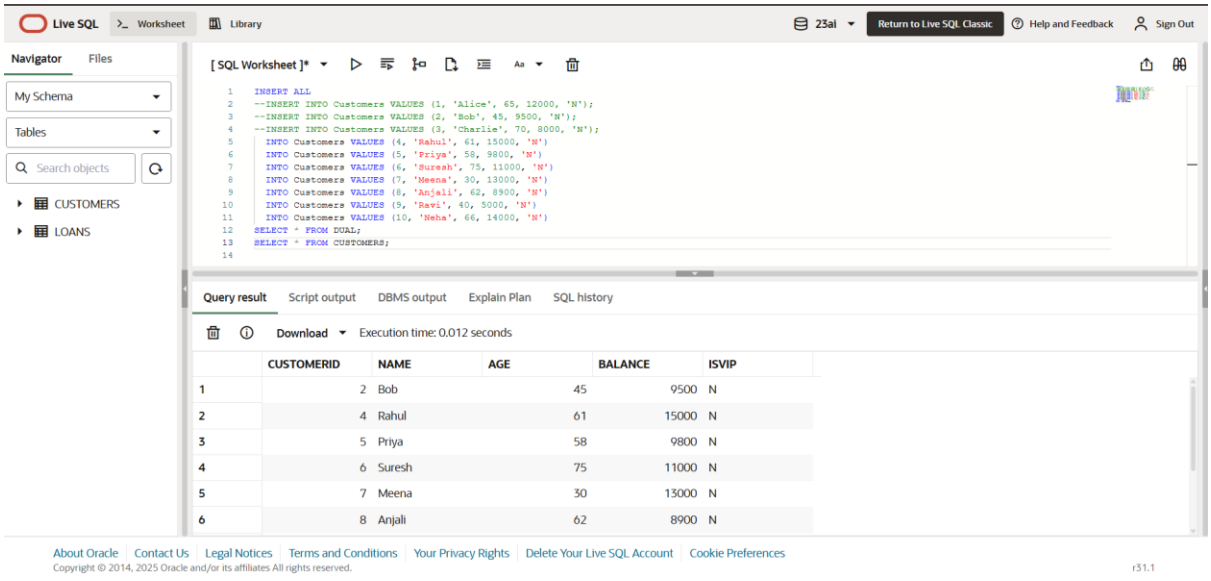


TABLE-LOAN

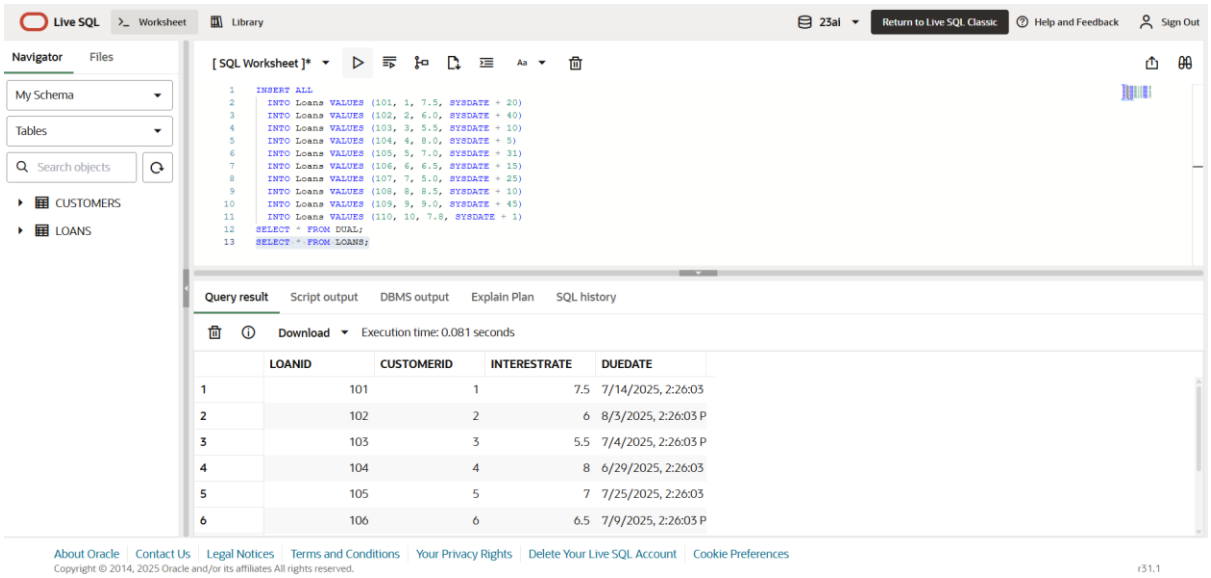


DATA INSERTION:-

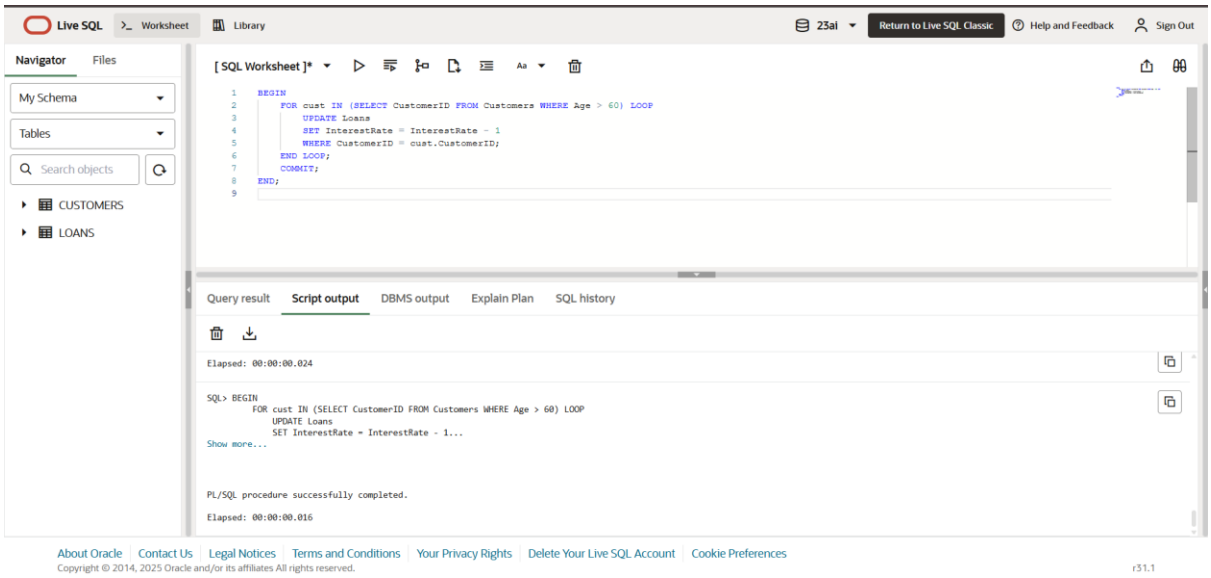
CUSTOMERS



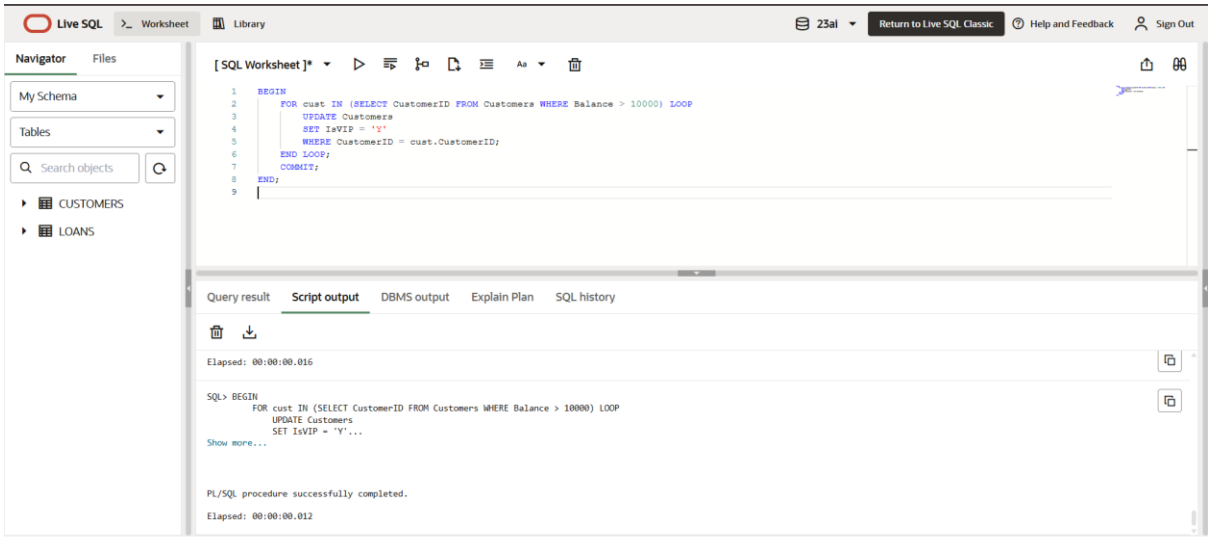
LOANS:



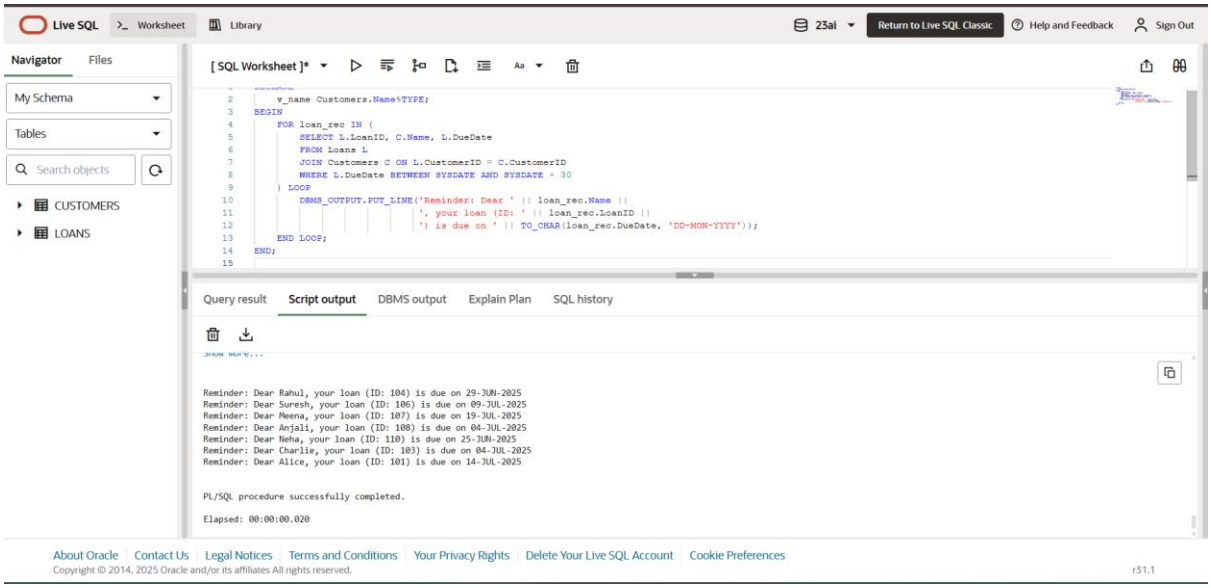
SCENARIO -1



SCENARIO-2



SCENARIO-3



Exercise 3: Stored Procedures

Scenario 1: The bank needs to process monthly interest for all savings accounts.

- **Question:** Write a stored procedure **ProcessMonthlyInterest** that calculates and updates the balance of all savings accounts by applying an interest rate of 1% to the current balance.

Scenario 2: The bank wants to implement a bonus scheme for employees based on their performance.

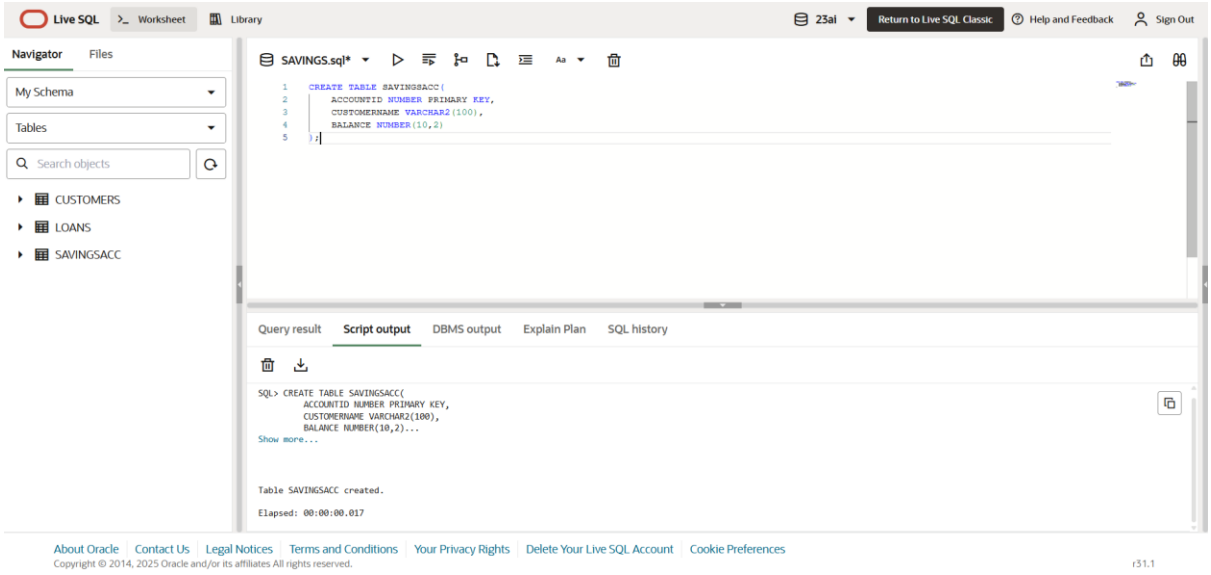
- **Question:** Write a stored procedure **UpdateEmployeeBonus** that updates the salary of employees in a given department by adding a bonus percentage passed as a parameter.

Scenario 3: Customers should be able to transfer funds between their accounts.

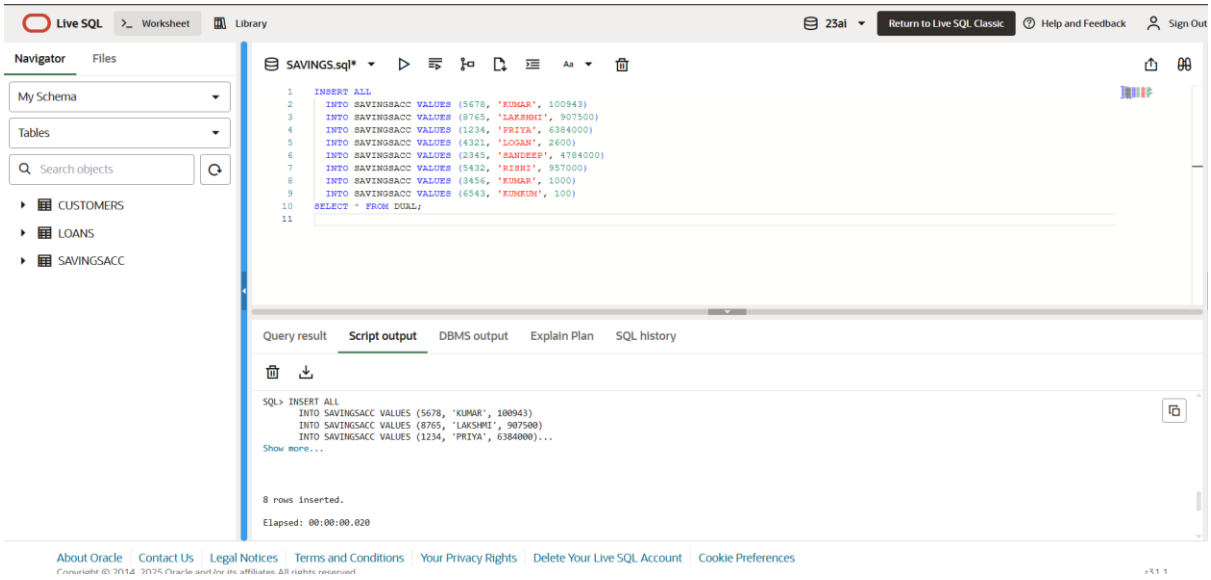
- **Question:** Write a stored procedure **TransferFunds** that transfers a specified amount from one account to another, checking that the source account has sufficient balance before making the transfer.

SCENARIO-1

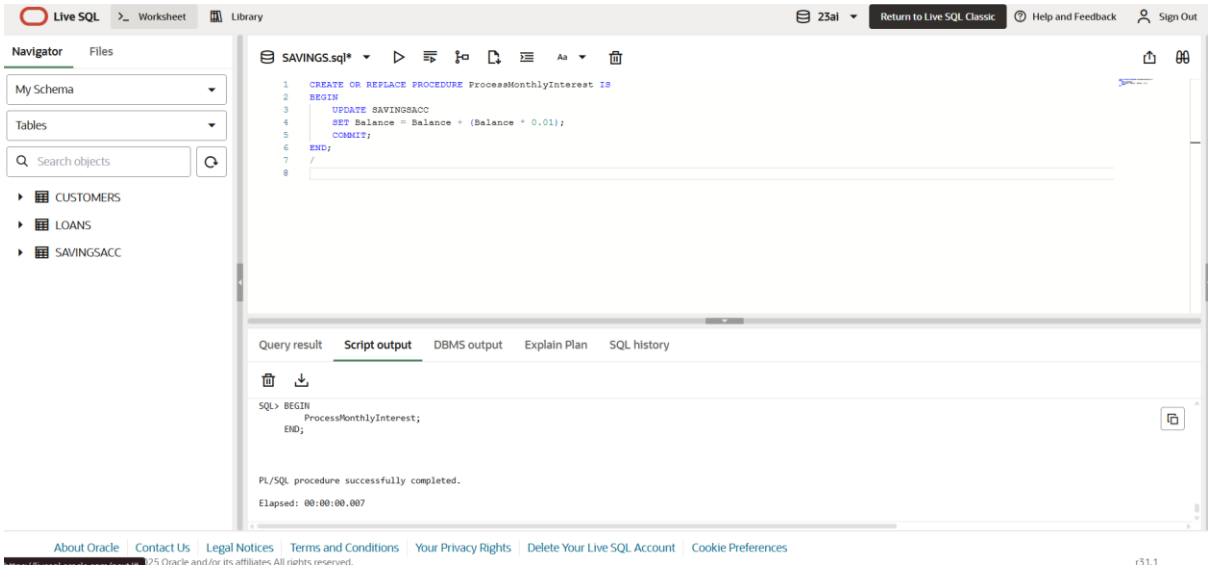
TABLE CREATION: SAVINGACC



DATA INSERTION

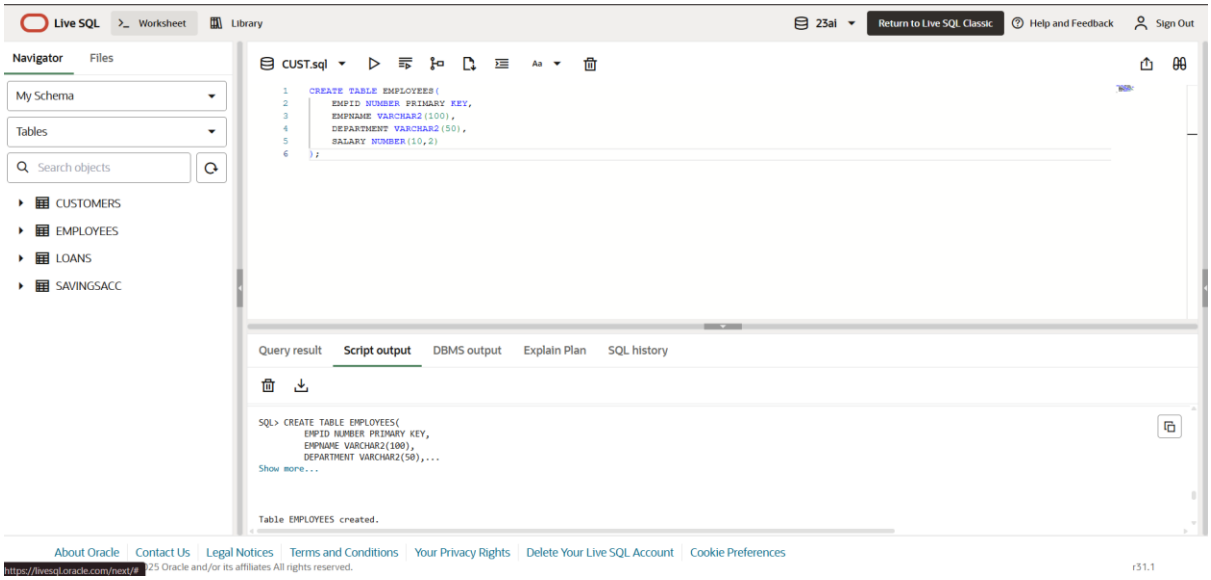


OUTPUT:

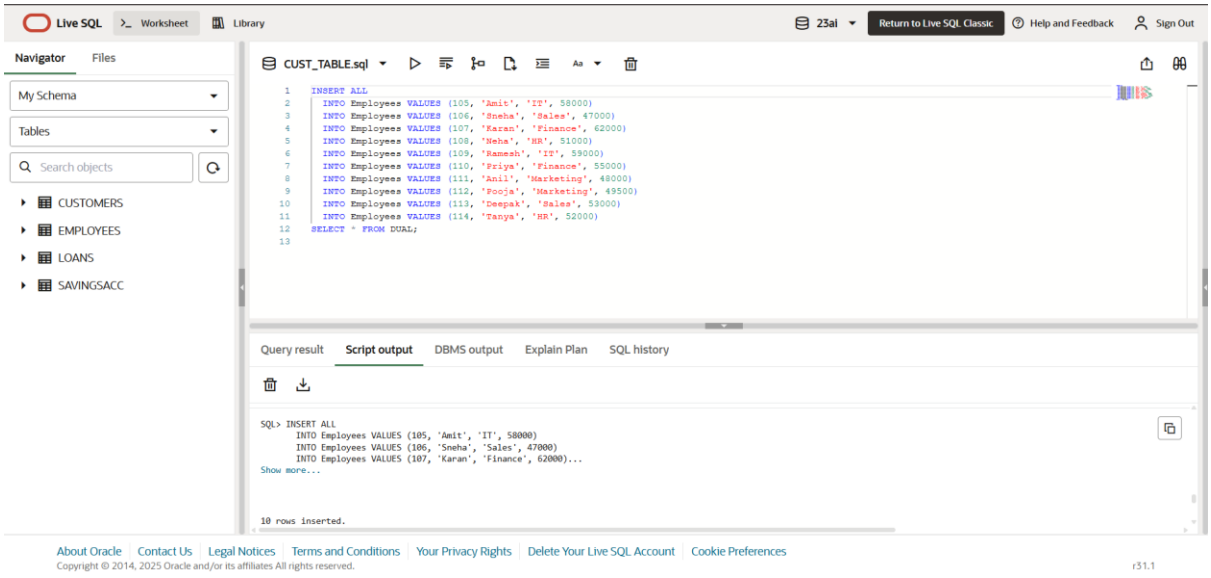


SCENARIO -2

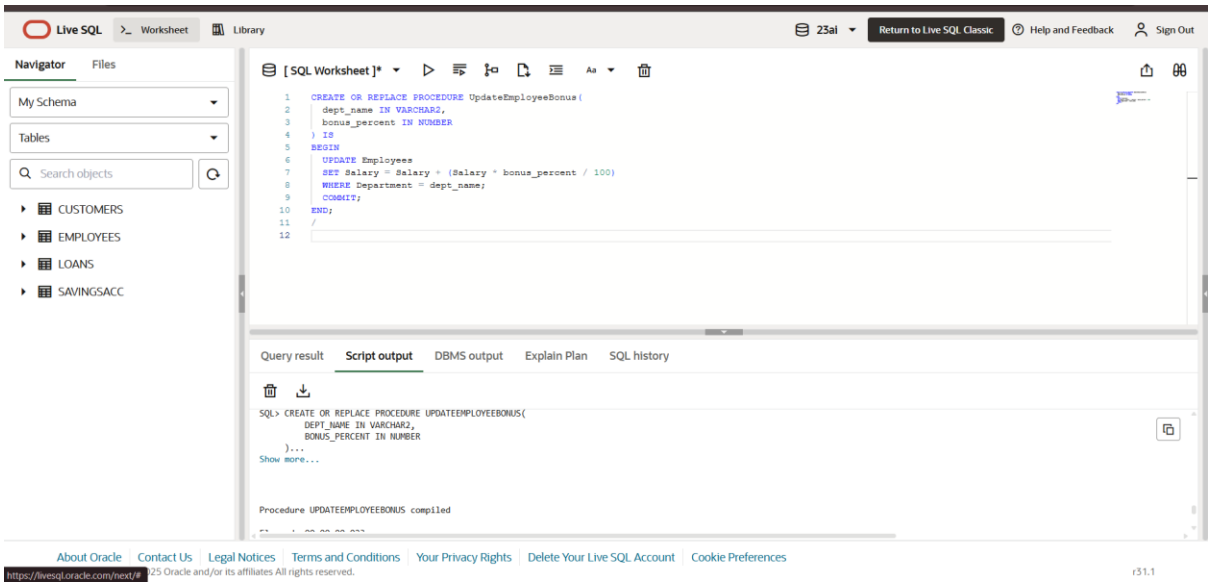
TABLE CREATION:- EMPLOYEES



DATA INSERTION

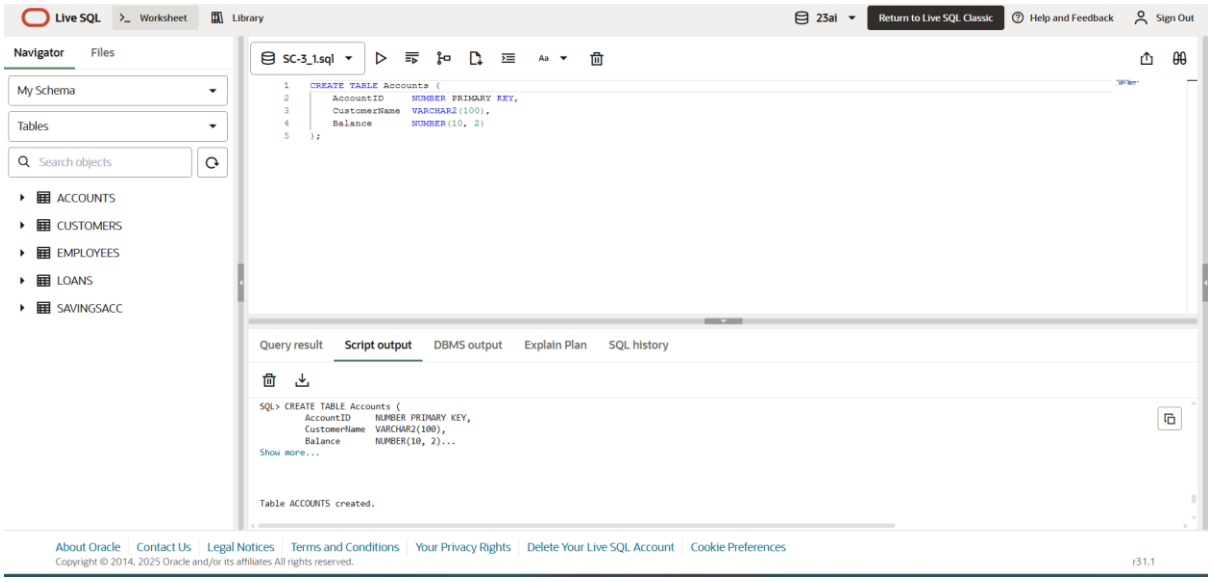


OUTPUT:

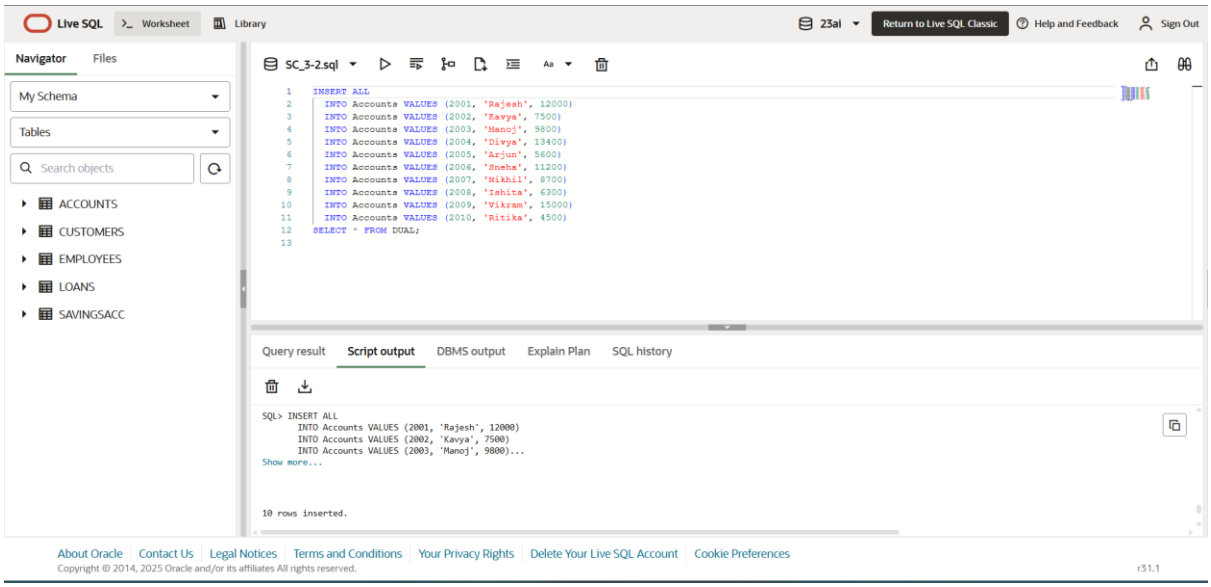


SCENARIO-3

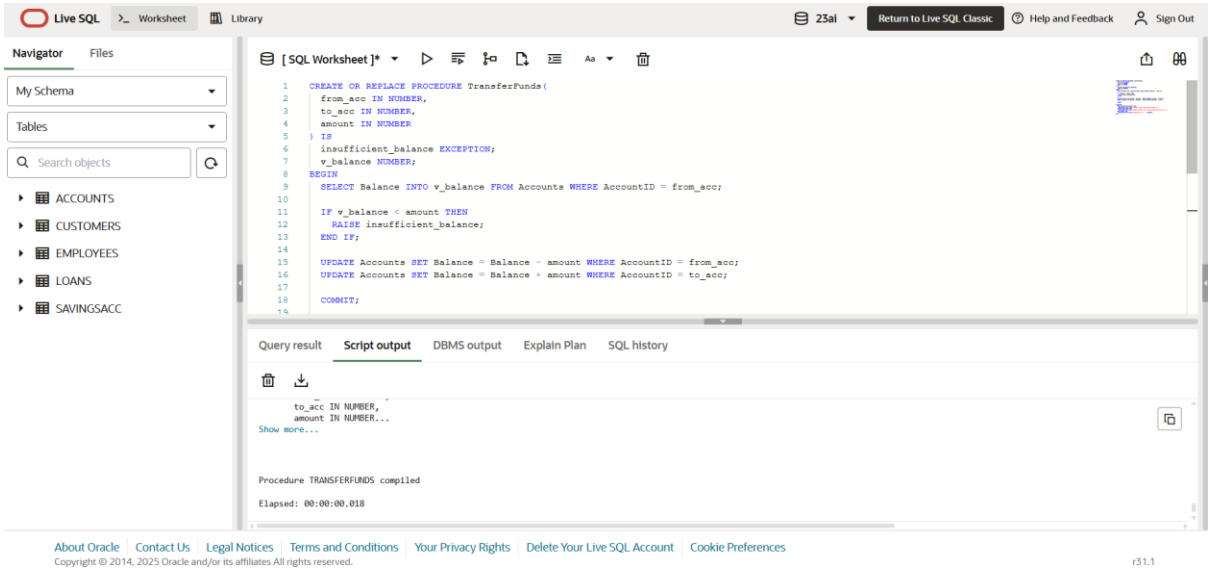
TABLE CREATION: ACCOUNTS



DATA INSERTION:



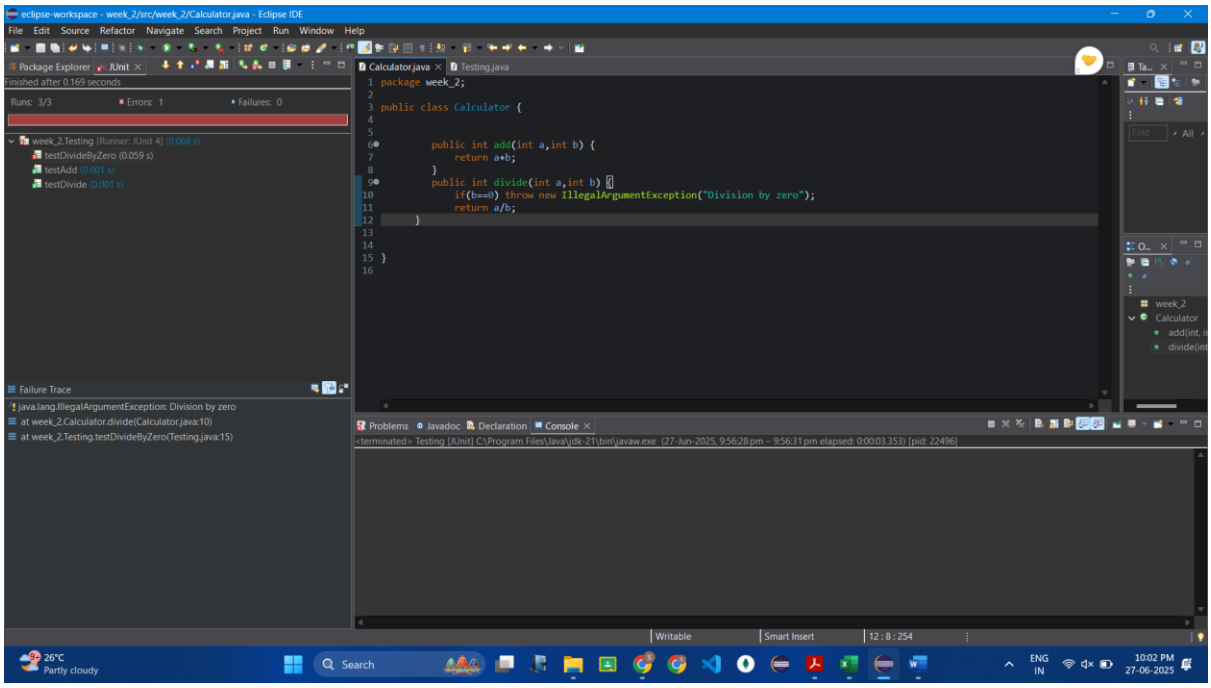
OUTPUT:

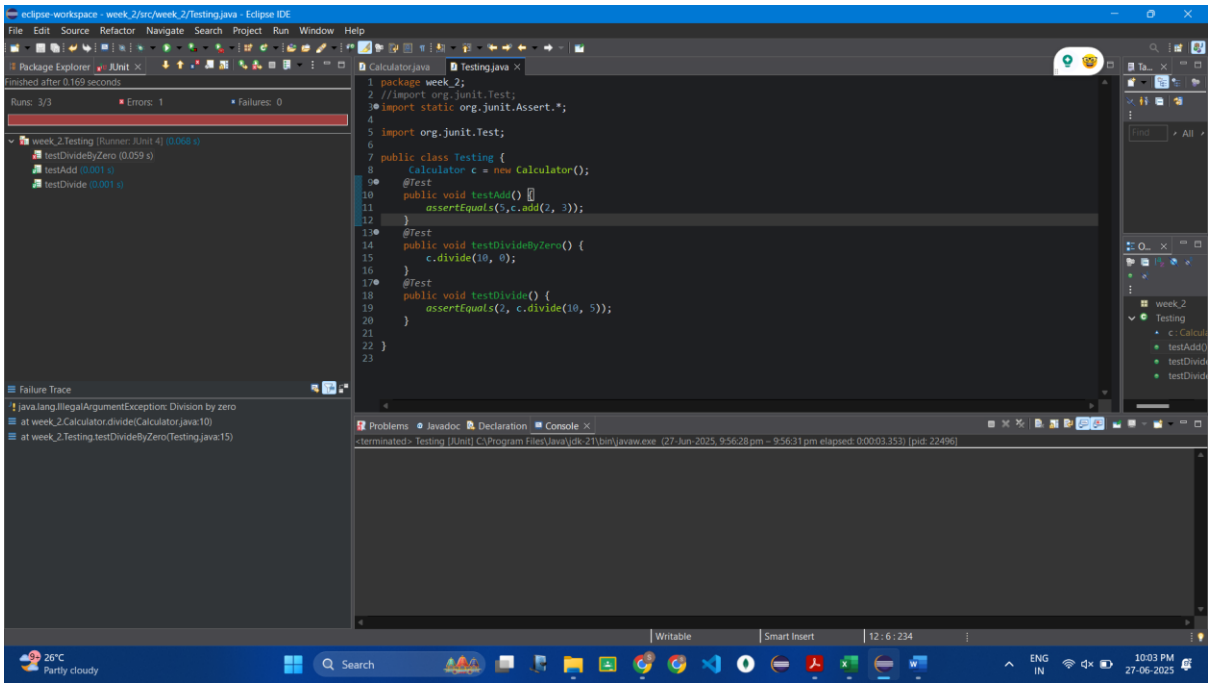


WEEK-2

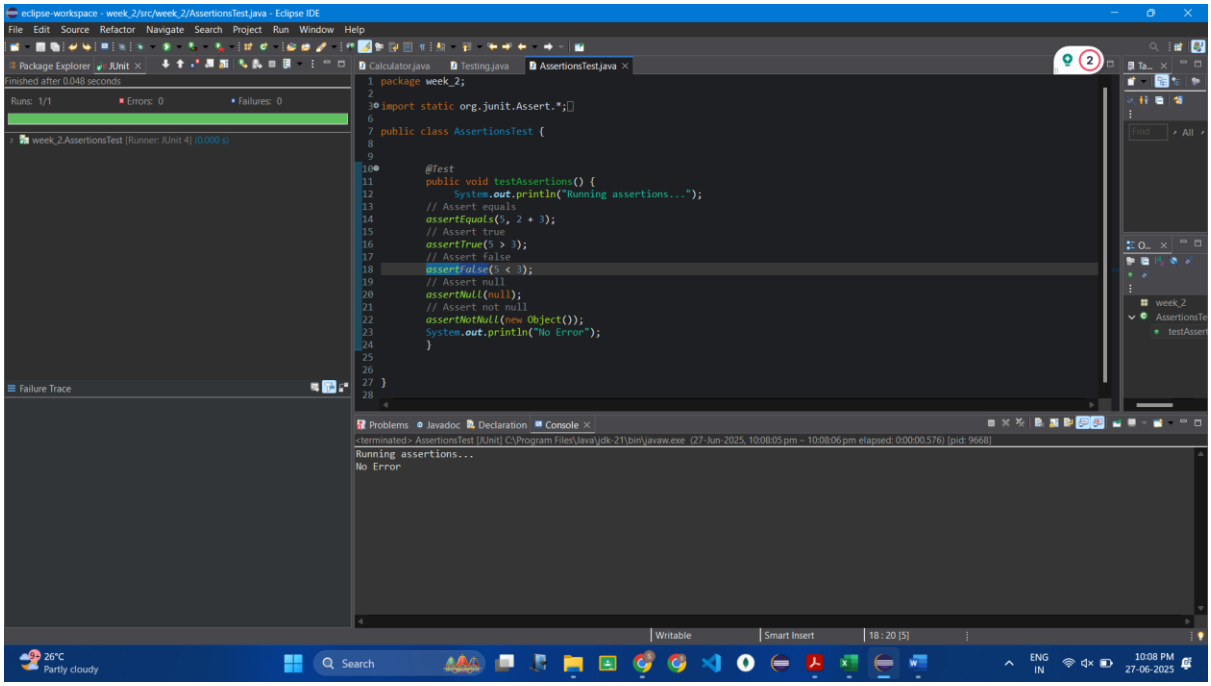
MODULE-4 TDD using JUnit5 and Mockito

Exercise 1: Setting Up Junit

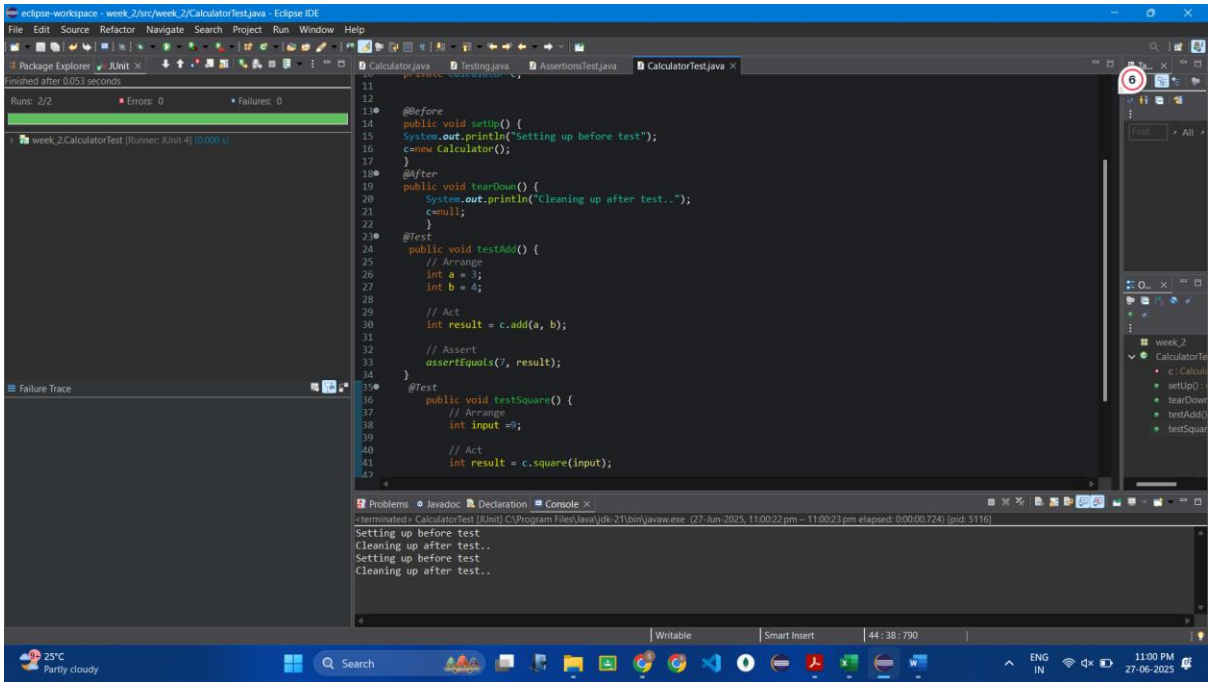




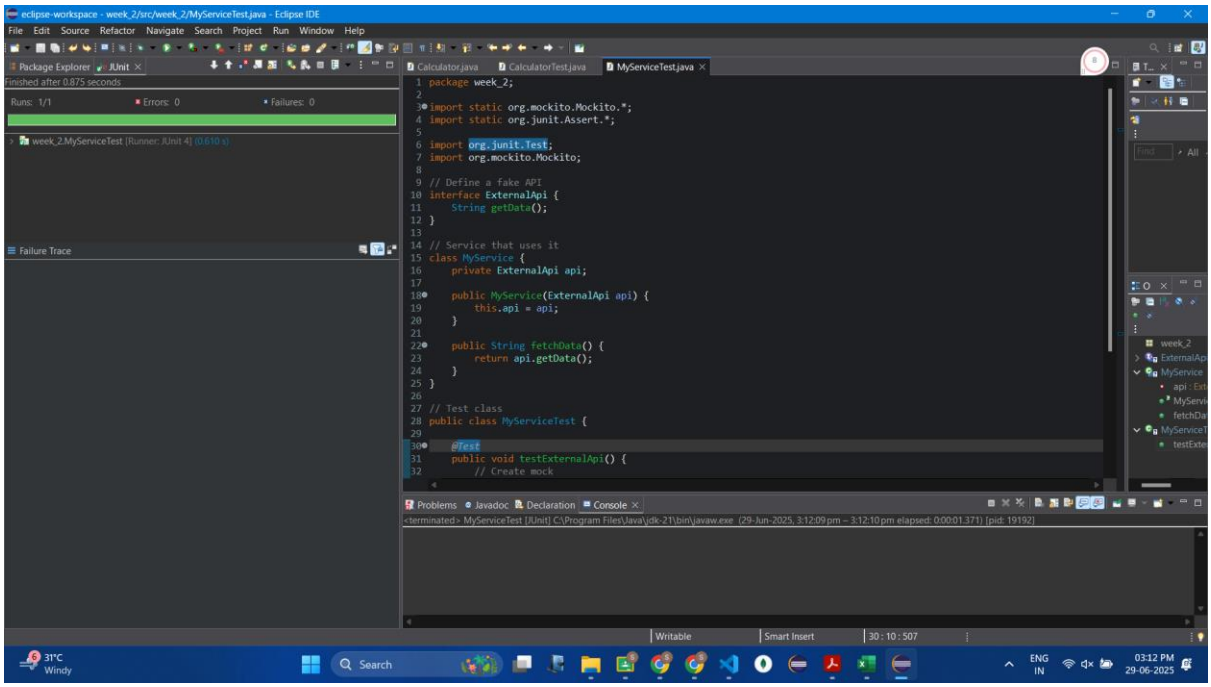
Exercise 3: Assertions in Junit



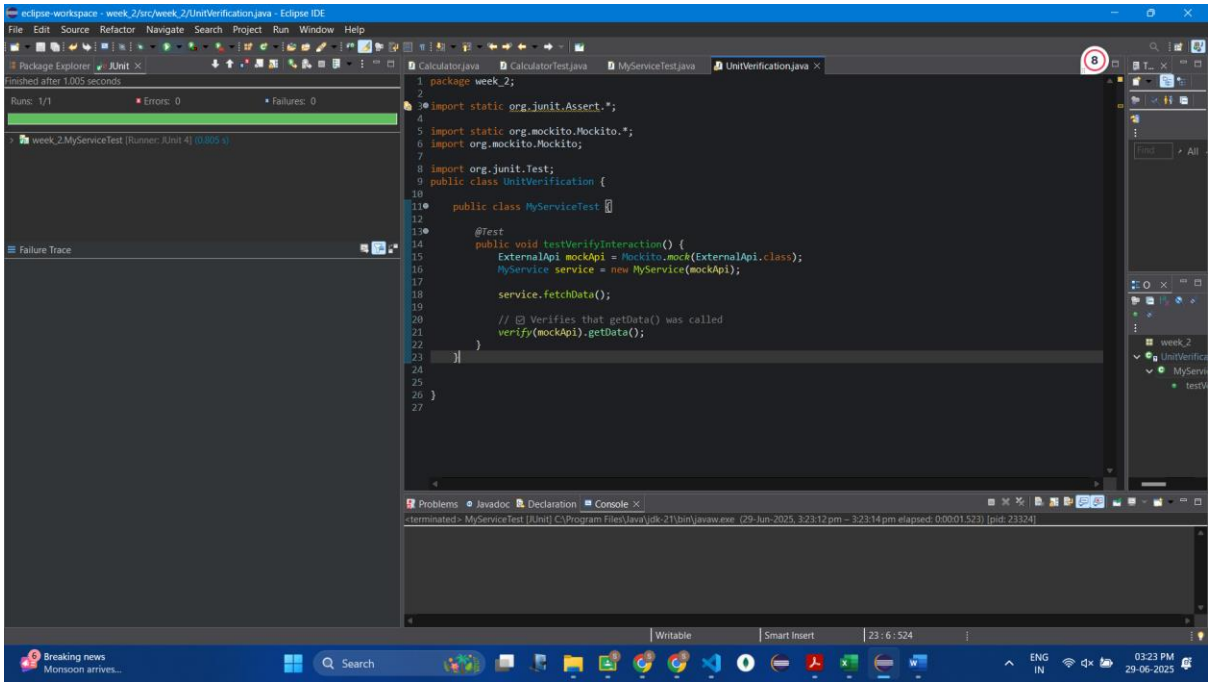
Exercise 4: Arrange-Act-Assert (AAA) Pattern, Test Fixtures, Setup and Teardown Methods in Junit



Exercise 1: Mocking and Stubbing



Exercise 2: Verifying Interactions



Exercise 1: Logging Error Messages and Warning Levels