

BITS PILANI, DUBAI CAMPUS
DUBAI INTERNATIONAL ACADEMIC CITY, DUBAI

FIRST SEMESTER 2025 – 2026

COURSE: CSF213/ECOM213/MACF212 (Object Oriented Programming)

COMPONENT: Lab 3

Week: 3

Aim: To develop skills in Java programming by working with class variables, methods, and user input.

Objective: To create modular Java programs that handle user data through classes and methods, reinforcing object-oriented concepts and input validation.

Problem Statements:

1. Define a class called Student that contains a student's name and three examination scores as instance variables. Your class must include:
 - A procedure for entering the student's name and scores from the user.
 - A procedure for computing the mean score.
 - A procedure to display the student's name and mean score.

Example Input and Output:

```
Enter student's name: Alice
Enter score for exam 1: 85
Enter score for exam 2: 90
Enter score for exam 3: 78
Student: Alice
Average score: 84.33
```

2. Develop a class named BankAccount with the given specifications: Private instance variables: accountNumber (String), balance (double). A constructor to initialise the account number and set the balance to zero. Procedures to:
 - Transfer funds into the account.
 - Withdraw funds (only if balance is adequate).
 - Exhibit the account particulars (account number and balance).

Utilise the Scanner class to engage with the user and execute several transactions.

Example Input and Output:

```
Enter account number: ACC123
Account created with balance $0.00
Enter deposit amount: 500
Deposit successful.
Account: ACC123, Balance: $500.00
Enter withdrawal amount: 200
Withdrawal successful.
Account: ACC123, Balance: $300.00
Enter withdrawal amount: 400
Insufficient balance.
Account: ACC123, Balance: $300.00
```