4. Draw a UML diagram for ATM System using CASE tool. The banking system allows a customer to access the financial transactions by ATM System, it has a step-by-step process describe the work of this process and elaborate the what are the work can do by customer, banking system, administrator and technicians with the ATM system.

AIM:

To design a **UML Diagram** for an **ATM System** using a CASE (Computer-Aided Software Engineering) tool, which illustrates the interactions between the customer, banking system, administrator, and technicians with the ATM system.

1. PROCEDURE:

Identify the Main Actors

- o **Customer**: The person using the ATM for financial transactions.
- Banking System: The backend system that verifies transactions.
- Administrator: Manages system configurations and security.
- o **Technician**: Handles hardware maintenance and error handling.

2. Define the Functionalities (Use Cases)

- Customer Functionalities:
 - Insert Card & Enter PIN
 - Withdraw Cash
 - Deposit Money
 - Check Balance
 - Transfer Funds
 - Print Mini-Statement

Banking System Functionalities:

- Authenticate User
- Approve Transactions
- Update Account Balance
- Log Transaction Details

Administrator Functionalities:

- Manage User Accounts
- Set Transaction Limits

Monitor ATM Activities

o Technician Functionalities:

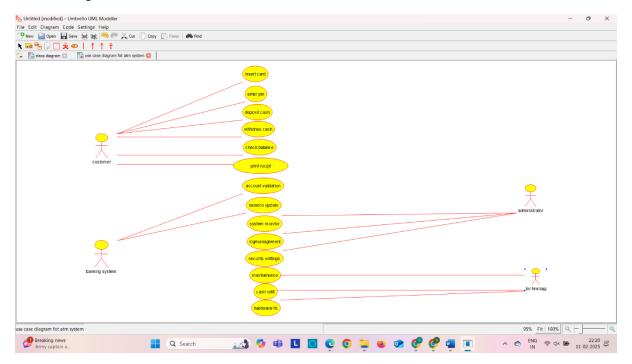
- Load/Refill Cash
- Maintain ATM Machine
- Fix Technical Issues

3. Create the UML Diagram Using a CASE Tool

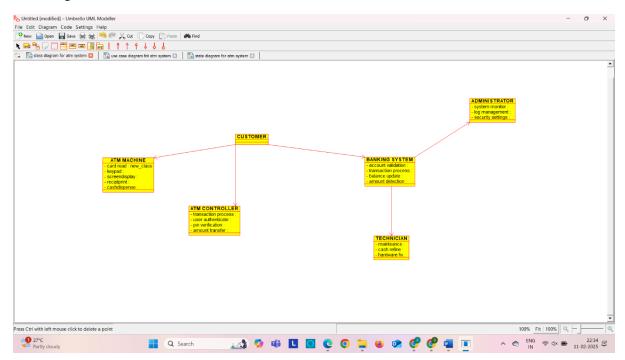
- Use **Use Case Diagram** to represent interactions.
- o Draw Class Diagram to show the system's structure.
- o Implement **Activity Diagram** for step-by-step workflows.
- o Design **Sequence Diagram** to show the message flow.

OUTPUT:

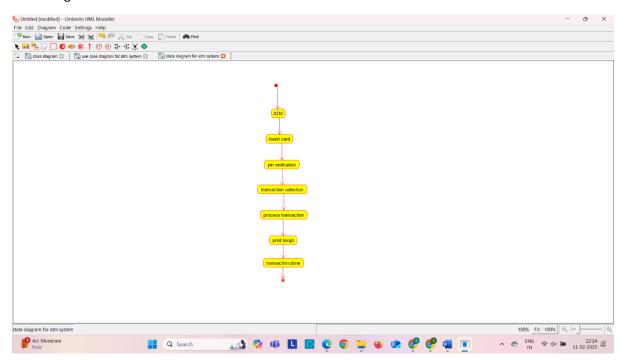
Usecase diagram



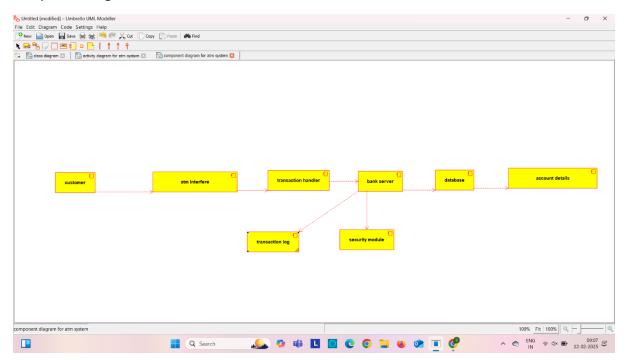
Class diagram



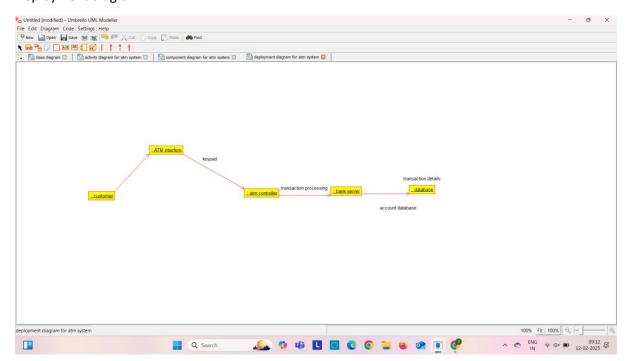
State diagram



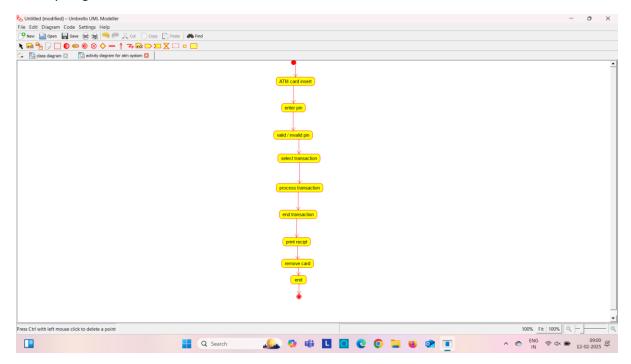
Component diagram



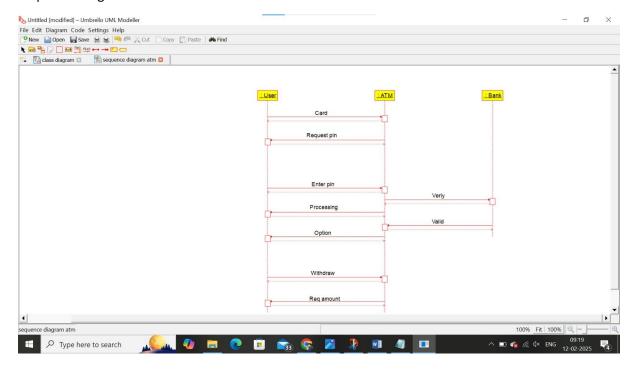
Deployment diagram



Activity diagram



Sequence diagram



RESULT:

Thus the UML diagrams for ATM system has been successfully developed.