## Pseudo-code Problems - Day 3

#### 1. Java OOPs

## Moderate

#### 1. Food Delivery System

a. Use composition for Order having Customer, Restaurant, and DeliveryBoy objects.

#### 2. Medical Record Manager

a. Use interfaces like Searchable, Printable. Apply polymorphism for different report types.

## 2. Data Structures & Algorithms

## Moderate

#### 1. Patient Record Hashing

a. Store patients in a **HashMap** using a unique patient ID. Retrieve, update and delete records efficiently.

#### 2. Maze Solver Bot

a. Use **Recursion** to solve a grid maze using backtracking.

## 3. Collections, Generics, Streams

## Moderate

#### 1. Library Book Filter

a. Use Stream filters and lambdas to get all books published after 2015 and with rating > 4.5.

#### 2. Payment Processor

# Pseudo-code Problems - Day 3

a. Create a generic Transaction<T> class for UPI, Card, and NetBanking, ensuring type safety.