

# Pseudo-code Problems - Day 1

## 1. Java OOPs

### ● Easy

#### 1. Pet Adoption App

- Design classes for **Pet**, **Dog**, **Cat**, and **Bird**. Use inheritance and constructors to initialize them.

#### 2. Library Membership Tracker

- Create a class **Member** with attributes like name, ID, membership date. Add methods to check membership validity.

## 2. Data Structures & Algorithms

### ● Easy

#### 1. Undo Feature in Text Editor

- Use a **Stack** to store undo operations and implement revert functionality.

#### 2. Call Center Queue Management

- Simulate **Queue** of customers waiting, and dequeue them based on priority (normal/emergency).

## 3. Collections, Generics, Streams

### ● Easy

#### 1. Student Score Storage

- Store marks in **HashMap<String, Integer>**, and display the highest scorer using streams.

#### 2. Employee Record Keeper

- Use **ArrayList<Employee>** and filter employees by department using streams.