import java.util.Scanner;

// Base class: Person

class Person {

String name, gender, address;

int age;

// Constructor for Person

public Person(String name, String gender, String address, int age) {

this.name = name;

this.gender = gender;

this.address = address;

this.age = age;

}

}

// Employee class inherits from Person

class Employee extends Person {

String empId, companyName, qualification;

double salary;

// Constructor for Employee

public Employee(String name, String gender, String address, int age,

String empId, String companyName, String qualification, double salary) {

super(name, gender, address, age);

this.empId = empId;

this.companyName = companyName;

this.qualification = qualification;

this.salary = salary;

}

}

// Teacher class inherits from Employee

class Teacher extends Employee {

String subject, department, teacherId;

// Constructor for Teacher

public Teacher(String name, String gender, String address, int age,

String empId, String companyName, String qualification, double salary,

String subject, String department, String teacherId) {

super(name, gender, address, age, empId, companyName, qualification, salary);

this.subject = subject;

this.department = department;

this.teacherId = teacherId;

}

// Method to display teacher details

public void display() {

System.out.println("\nTeacher Details:");

System.out.println("Name : " + name);

System.out.println("Gender : " + gender);

System.out.println("Address : " + address);

System.out.println("Age : " + age);

System.out.println("Emp ID : " + empId);

System.out.println("Company : " + companyName);

System.out.println("Qualification : " + qualification);

System.out.println("Salary : " + salary);

System.out.println("Subject : " + subject);

System.out.println("Department : " + department);

System.out.println("Teacher ID : " + teacherId);

}

}

// Main class to handle input and display output

public class TeacherDetails {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Asking for number of teachers

System.out.print("Enter the number of teachers: ");

int N = scanner.nextInt();

scanner.nextLine(); // Consume newline

// Array to store teacher objects

Teacher[] teachers = new Teacher[N];

// Collecting details for each teacher

for (int i = 0; i < N; i++) {

System.out.println("\nEnter details for Teacher " + (i + 1) + ":");

System.out.print("Name: ");

String name = scanner.nextLine();

System.out.print("Gender: ");

String gender = scanner.nextLine();

System.out.print("Address: ");

String address = scanner.nextLine();

System.out.print("Age: ");

int age = scanner.nextInt();

scanner.nextLine(); // Consume newline

System.out.print("Employee ID: ");

String empId = scanner.nextLine();

System.out.print("Company Name: ");

String companyName = scanner.nextLine();

System.out.print("Qualification: ");

String qualification = scanner.nextLine();

System.out.print("Salary: ");

double salary = scanner.nextDouble();

scanner.nextLine(); // Consume newline

System.out.print("Subject: ");

String subject = scanner.nextLine();

System.out.print("Department: ");

String department = scanner.nextLine();

System.out.print("Teacher ID: ");

String teacherId = scanner.nextLine();

// Creating and storing the teacher object

teachers[i] = new Teacher(name, gender, address, age, empId, companyName, qualification, salary, subject, department, teacherId);

}

// Displaying all teachers' details

System.out.println("\nTeacher Information:");

for (Teacher teacher : teachers) {

teacher.display();

}

scanner.close();

}

}