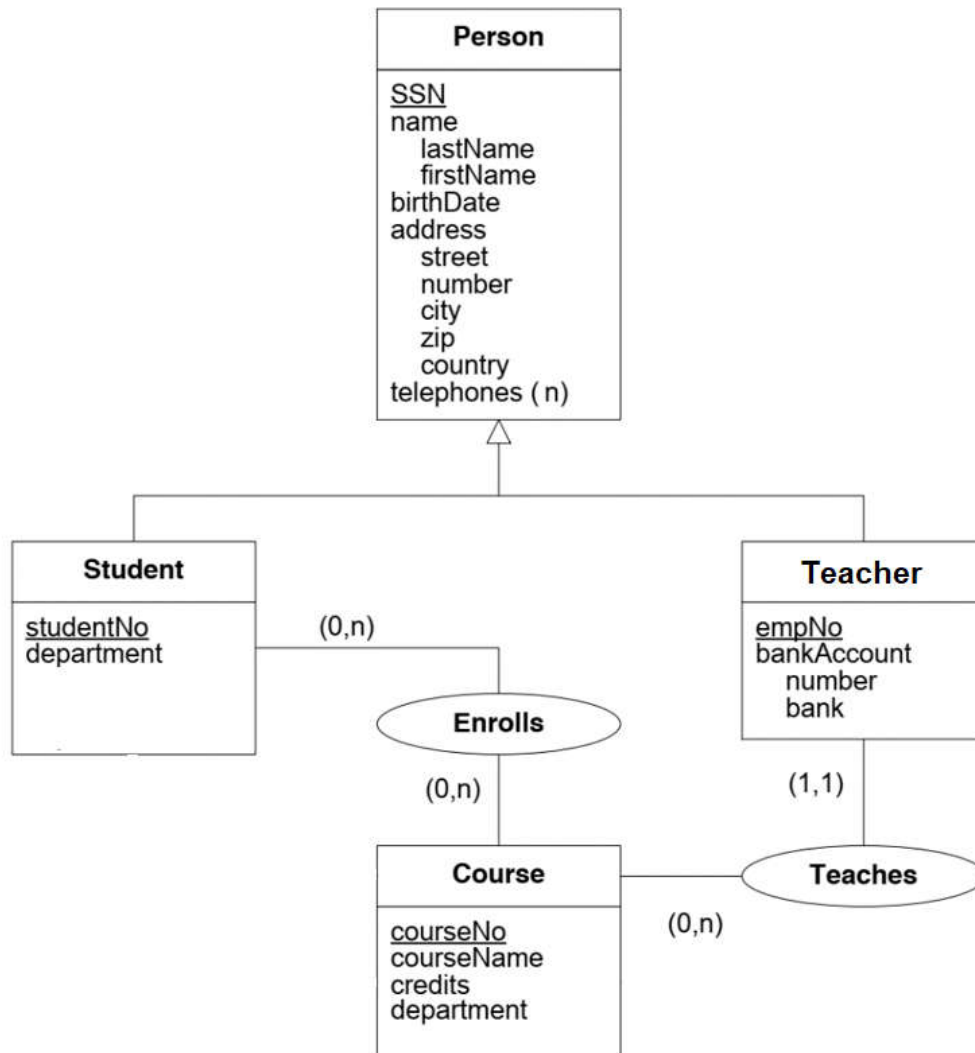


LAB SESSION WORK 3 (OBJECT/RELATIONAL DATABASES)

EXERCISE

Create, in Oracle 11g, all UDTs and tables that correspond the following diagram



MANIPULATION WITH SQL

1. Insert a new person with SSN “**123456789**”, with name Mahammed Kamel, born on “**1/1/1980**” and living in “**05 Juillet City, M’sila**”, and having telephones “**12345**” and “**54321**”
2. Insert a new student with SSN “**123123123**”, with name “**Brahim Badre**”, born on “**1/5/1990**”, living in “**Ishbilia, M’sila**”, no telephones, student number “**999**”, department of Computer Science.
3. Add a new teacher with SSN “**987987987**”, with name “**Benazi Makhoulf**”, born on “**31/5/1980**”, living in “**1000 Logements, M’sila**”, telephone number “**2222**”, employee number “**666**”, bank account “**33333333**” at “**AGB Banck**”, and teaching no courses.
4. Add a new course identified by “**ALGO-1**”, entitled “**Algorithms 1**” of 5 credits, department of Computer Science, having as professor the newly inserted “**Benazi Makhoulf**”, and for the moment no students enrolled or that took the course in the pasts.
5. Add the course identified by “**ALGO-1**” as being enrolled in by the student “**Brahim Badre**”.

Querying

1. Give the names of the persons.
2. Give the names and student number of the students.
3. Give the names of the persons who are not students nor faculty.
4. Find the name and address of the person whose SSN is **123456789**.
5. Give the telephone numbers of the student **Brahim Badre**.
6. Give the name of persons having the telephone number **12345**.
7. Give the name of persons having no telephone number.
8. Give the numbers and names of students who are enrolled in the course **ALGO-1**.
9. Give all student-teacher pairs where the student is enrolled in a course taught by that teacher
10. Give the course number of the courses in which **Brahim Badre** is enrolled.