**Question 1 company projects management database**

For this question, I built 4 tables (Project, Company\_location, Team, Employee)

For Project table, there were 7 columns (project\_code, company\_id, title, startdate, enddate, assigned\_budget, PersonInCharge). The project\_code was the primary key and the company\_id was the foreign key of this table.

For company\_location table, there were 6 columns (company\_id, city, country, address, phone\_number, director\_name). The company\_id was the primary key of this table.

For team table, there were 4 columns (TeamId, Project\_code, employee\_id, inhabitants). The TeamId was the primary key and project\_code and employee\_id were the foreign key of this table.

For Employee table, there were 4 columns (employeeID, Firstname, Lastname, role). The employ\_id was the primary key of this table.

The Diagrams of the table relationships was shown below:



**Question 2 lending company management database**

For this question, I built 4 tables (Loan, Lenders\_investment, Lenders\_information, Borrower\_information)

For Loan table, there were 4 columns (LoanID, refund\_deadline, Total\_amount, BorrowerID). The LoanID was the primary key and the BorrowerID was the foreign key of this table.

For Lenders\_investment table, there were 4 columns (investmentID, investment\_amount, LenderID, LoanID). The InvestmentId was the primary key and the LendID and LoanID were the foregin key of this table.

For Borrower\_information table, there were 6 columns (BorrowerID, Firstname, Lastname, Phonenumber, address, risk\_value). The BorrowerID was the primary key of this table.

For Lenders\_information table, there were 6 columns (LenderID, Firstname, Lastname, Phonenumber, address, amount\_of\_money). The LenderID was the primary key of this table.

The Diagrams of the table relationships was shown below:



**Question 3 Restaurant menu management database**

For this question, I built 5 tables (ingrediet\_requirement, storage, dishes\_information, dishes\_category, employees)

For ingrediet\_requirement table, there were 5 columns (ingredientID, ingredientName, required\_amount, unit\_measurements, dishID). The ingredientID was the primary key and the dishID was the foreign key of this table.

For storage table, there were 4 columns (storageID, current\_amount, unit\_measurements, ingredientID). The storageID was the primary key and the ingredientID was the foregin key of this table.

For Dishes\_information table, there were 5 columns (DishID, dish\_name, dish\_description, photo, price). The DishID was the primary key of this table.

For dishes\_category table, there were 5 columns (dishes\_categoryID, category\_name, category\_description, dishID, emploeeID). The dishes\_categoryID was the primary key and the dishID and employeeID were the foreign key of this table.

For employees table, there were 5 columns (employeeID, firstname, lastname, phonenumber, role). The employeeID was the primary key of this table.

The Diagrams of the table relationships was shown below:

