Tutorial 5 Solutions

Exercise 1 solution

- client(id_client, First_Name, Last_Name, Middle_Name, Address
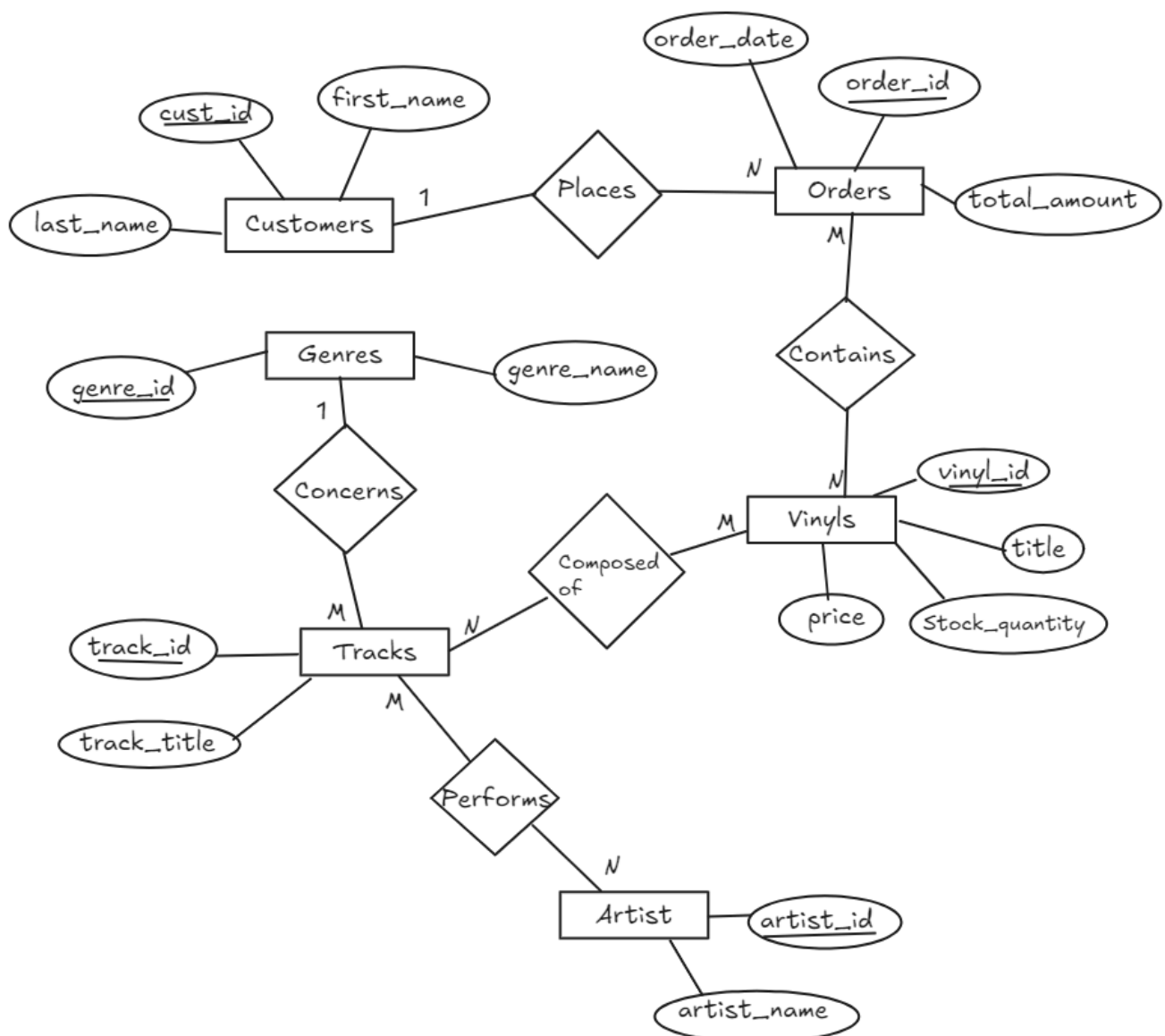- client_emaill(id_client,email)

Exercise 2 solution

Student(id_student, first_name, last_name)
Course(code, Title, num_credits, id_prof)
Professor(id_prof, first_name, last_name, main_office_number, email)
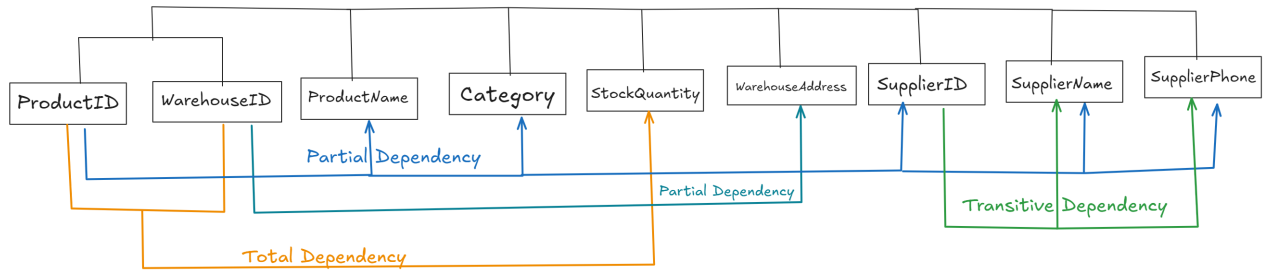student_course(id_student, code)

Exercise 3 solution

Exercise 4 solution

- supposing that each one product (ProductID) can have one supplier (SupplierID)

1. The Dependency Diagram:

2. The 3NF

- The relation is already in 1NF
- The 2NF of the relation:

Inventory_Stock(Product_id,WarehouseID, StockQuantity)
Product(ProductId, ProductName, Category, SupplierID, SupplierName, SupplierPhone)
Warehouse(WarehouseID, WarehouseAddress)

- The 3NF of the relation:

Inventory_Stock(Product_id,WarehouseID, StockQuantity)
Product(ProductId, ProductName, Category, SupplierID)
Warehouse(WarehouseID, WarehouseAddress)
Supplier(SupplierID, SupplierName, SupplierPhone)