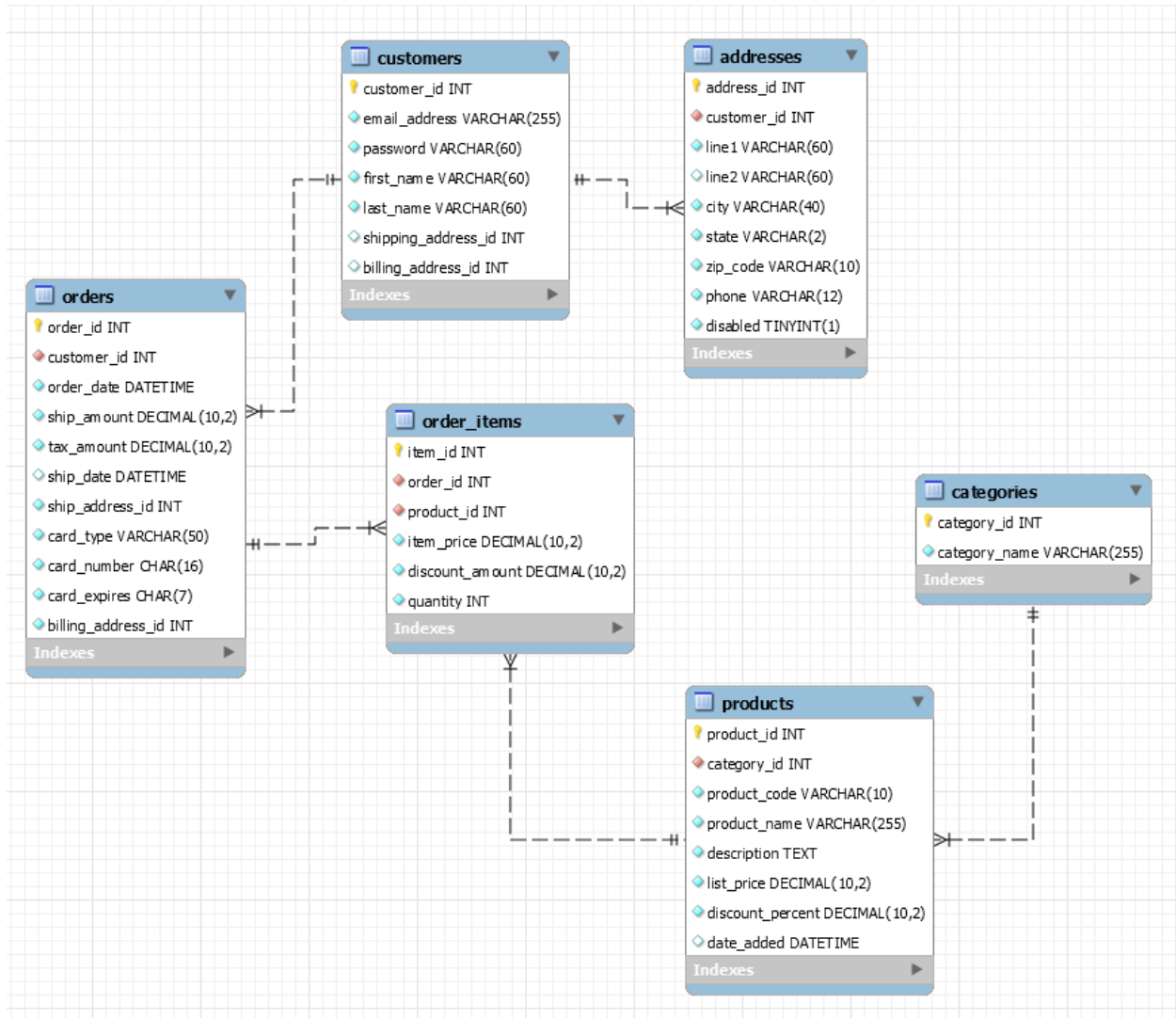


1. The six of the tables are related through common columns that they have in common with. The primary key is customer_id which three tables share: customers, addresses, and orders. The foreign keys are order_id, product_id, category_id. Which extends the relation from the orders table to order_items, products, and categories tables. The cardinality between customers and addresses is customer_id.



- 2B. I will have 2 tables. 1 for student information and 1 for the classes information. The primary key is student_id and the foreign key is classes_id.

2C. A relation is in 1NF if it contains an atomic value. In our tables, the column Classes has multiple values. Multiple students appear for multiple classes in the enrollment. A relation will be in 2NF if it is in 1NF and all non-key attributes are fully functional, dependent on the primary key. The student_name, major, email, address columns work dependently with the primary key, student_id. A relation will be in 3NF if it is in 2NF and no transition dependency exists. The tables follow the rule of 3NF as the foreign key (classes) depends on the primary key (student_id).