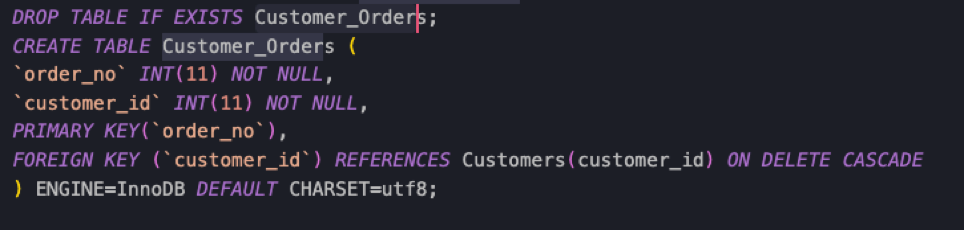
The ERD greatly simplifies the work of creating a database, in the Entity Relationship Diagram we can define the entities, their relationships and the data types each attribute will need to have. In this case the ERD that was given is not fully correct and it had to be modified to create more specific relationships and correct data types. (This will be explained in the ‘Discussion of ERD’ document)

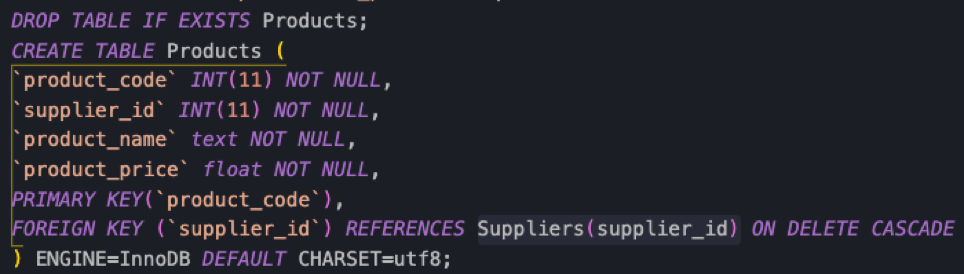
To avoid any errors when running the top-level script I had to plan a correct order to create the code of the tables and their relationships, as we can’t create a relationship until both tables are created.

To be able to create a ‘Customer\_Orders’ table I had to create ‘Customers’ first. ‘Customer\_Orders’ has a foreign key which references the customer\_id attribute at the ‘Customers’ table.

These foreign keys establish the relationship between the tables and make this database a relational database.

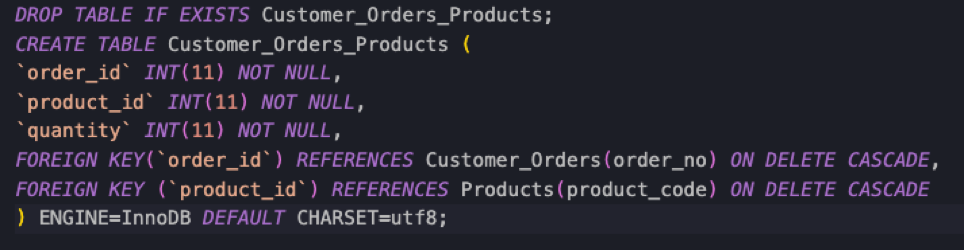


The next relationship is very similar to the first one. We have to first create the ‘Suppliers’ table and after that then the ‘Product’ table, as this table uses the supplier\_id attribute as reference for the foreign key.



These first two relationships from these tables were not reflected in the ERD, which made the creation of the table at the beginning a bit confusing.

The last table with relationships will be the ‘Customer\_Orders\_Products’ where it contains two different foreign keys referencing the ‘Customer\_Orders’ and the ‘Products’ table. As the order\_no from Customer\_Orders is a Primary Key in a different table this foreign key will have a ‘unique’ constraint too.



We also have created a constraint for all foreign keys - ON DELETE CASCADE. This tells MySQL what to do when we want to delete a record. In this case, when we delete a record from a table all the attributes linked with this foreign key relationship will be also deleted.