Steps:

Step 1: Write the data requirements for the system.

Step 2: Draw the initial ER diagram for the system. We can use any chart-drawing tool(i.e. Erwin, lucidchart.com, etc)

Indicate cardinality and participation constraints on ER diagram. We can use different notations to show cardinality ratios. (i.e. min-max notation, Crow's Foot notation)

Step 3: Map the ER diagram into relational schema. Show the resulting relational schema: show the tables, primary keys and foreign keys.

Step 4: Discuss database normalization rules on the tables. Show the functional dependencies that violate 1st, 2nd and 3rd normal forms. Normalize the table(s) into 3NF.

Step 5: Show the final relational schema after normalization.

Step 6: Create tables using appropriate SQL command. Make sure to include primary key and foreign key definitions and triggered actions on foreign keys. Decide also about NULL/NOT NULL and DEFAULT values for the attributes.

Step 7: PL/SQL: Define two different stored procedures and two triggers.

Step 8: Implement CRUD operations (Create, Read, Update and Delete) for one of your tables by using PHP or Python. We use MAMP application package for implementation. It includes Apache Server, PHP/Python and MySQL database.