PHP and Database practice

1. A database contains the information related to artworks of different cities. Each artwork is characterized by a code, the name, its category (painting, sculpture, architecture), and the city and the country where it is located. For each artwork the author is known, who is characterized by a code, the name, the surname, his/her birth year and birth city.
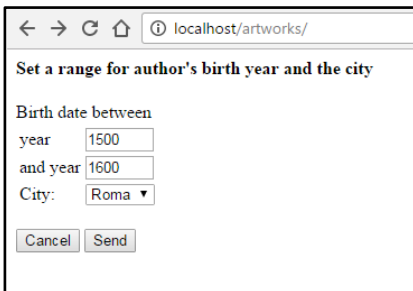
The relational schema is composed by the following tables

Artwork(artworkCode, name, category, city, country, author)
Author(authorCode, name, surname, birthYear, birthCity)

a) write a SQL script to create the tables above, specifying attributes and keys of each table.
b) write a SQL query to show all the artworks in Rome of all authors born between 1590 and 1600. The query must return the surname of the author and the name and category of the artwork. Results must be presented in alphabetical (ascending) order by author.
c) write a transaction to insert a new author and an artwork of his own in the database.

2. Design a web application for the online consultation of the DB. The access form should show two textboxes to specify a range of years for searching authors by birth year and a select box to for searching artworks by city. Once such fields are set up, the application must show all the artworks of authors born during the specified range and located in the selected city, ordered by author's surname, in a table like the following one. The rows of the table must have a different color (of your choice) based on the category of the artwork (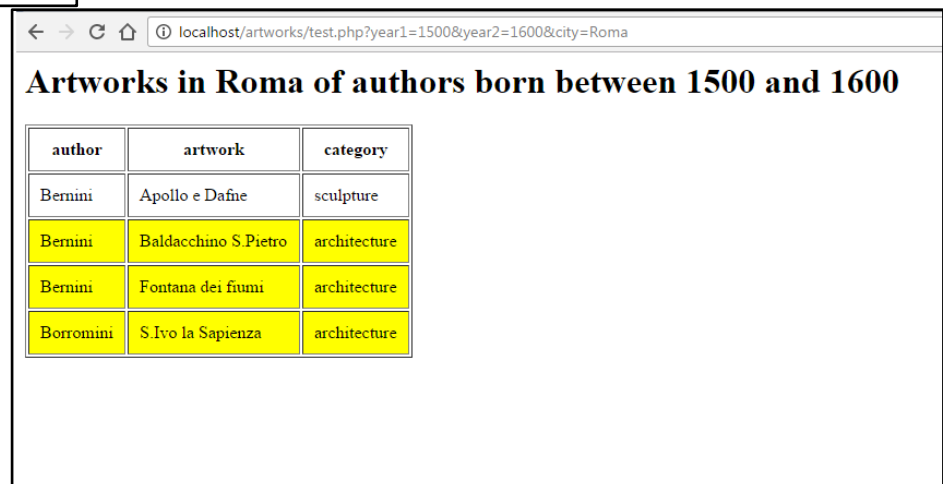painting, sculpture, architecture).