

CS 327 Spring 2025

Homework 4

SQL Queries.

Consider the following schema based on the VRG database given in class. Note: the tables shown here have fewer columns than the actual tables in the database to keep the problem simple.

ARTIST (ARTISTID : integer [PK], FIRSTNAME : string, LASTNAME : string, NATIONALITY: string, DATEOFBIRTH: integer)

WORK (WORKID : integer [PK], TITLE : string, ARTISTID : string)

CUSTOMER (CUSTOMERID : integer [PK], FIRSTNAME : string, LASTNAME : string, COUNTRY: string)

TRANS (TRANSACTIONID: integer [PK], CUSTOMERID : integer, WORKID : integer, SALESPRICE: float)

The key fields are underlined, and the domain of each field is listed after the field name. WORK.ARTISTID is a foreign key referring to ARTIST.ARTISTID, TRANS.CUSTOMERID is a foreign key referencing CUSTOMER.CUSTOMERID, and TRANS.WORKID is a foreign key referring to WORK.WORKID.

Write the following queries in SQL in the space given:

[5 x 5 points]

- a) Display the titles and sales prices of all works sold for more than \$10,000
- b) Display the first and last names of all artists whose at least one work sold for more than \$10,000. Each name must appear only once.
- c) Display the first and last names of all customers who bought a painting for more than \$10,000. Each name must appear only once.

- d) Display the First and Last Names and Nationalities of all artists who were born between the years 1850 and 1900.
- e) Display the titles of all paintings that were either painted by a French artist, or bought by a customer from France. Each title must appear once.