

CSE 111 – DATABASE SYSTEMS

Quiz 1 (30 points)

Consider the following relational schema, provided as a `SQLite` database populated with sample data:

- `Product(maker, model, type)`
- `PC(model, speed, ram, hd, price)`
- `Laptop(model, speed, ram, hd, screen, price)`
- `Printer(model, color, type, price)`

Write `SQL` statements for the following queries (**5 points each**) in the given `quiz-1.sql` file:

1. What makers produce Laptops cheaper than \$2000 with a screen larger than 16?
2. What makers produce PCs but do not produce Laptops?
3. For every maker that sells both PCs and Printers, find the combination of PC and Printer that has maximum price. Print the maker, the PC model, Printer model, and the combination price (PC price + Printer price).
4. What Laptop hd sizes are offered in at least 2 different models?
5. What PCs are less expensive than all the Laptops? Print the model and the price.
6. What makers produce at least a Laptop model and at least 2 Printer models?

We will grade your quiz by running the `quiz-1.sql` file on the given database and another database populated with different data. So, make sure your `SQL` statements are general. You should test that your code works without errors by running the command `sqlite3 data.sqlite < quiz-1.sql` in the terminal. `quiz-1.sql` is the only file you have to turn in.