COMP 3421 Database Organization & Mgmt I

Professor Andrew Hannum

Assignment 2

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Step 2 of Your PDA (Personal Database Application)

Note1: this assignment is a slight modification of material developed by the Stanford Database Group

Note2: see Recording Your Session in the on-line Getting Started With mySQL document for a guide to preparing output to hand in with your assignment. It will be useful for this and subsequent PDA parts.

Note3: Make sure you backup your data and files for executing commands. It is your computer, you are responsible for your data, I suggest backing up frequently to an external device.

1. **(10 pts.)** Consider the E/R schema you designed for your PDA in PDA Assignment #1. Please attach a copy of the schema. Use the method described in the text and in class for translating an ER schema to relations to produce a set of relations for your database design. Please specify your relational schema and underline key attributes.

Answer:

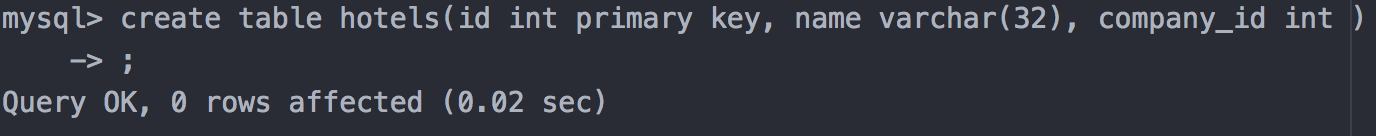
|  |  |
| --- | --- |
| hotels: | id name company\_id |
| companies: | id name |
| staffs: | id name age gender salary Hotel\_id |
| customers: | id name age gender Hotel\_id Room\_id Bill\_id Serve\_id |
| rooms: | id room\_id type status Hotel\_id |
| bills: | id date price Customer\_id Staff\_id |

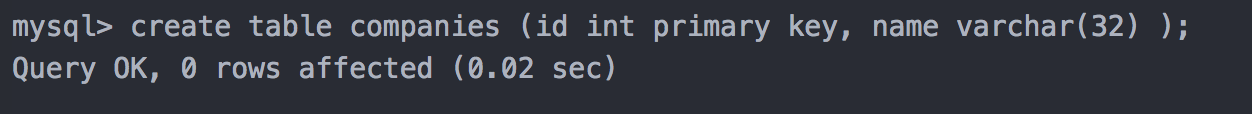
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1. **(20 pts.)** Write an SQL database schema for your PDA, using the CREATE TABLE commands described in the handout Getting Started With mySQL. Pick suitable datatypes for each attribute. Hand in a printout of the commands you use to create your database schema (it is a good idea to keep this file for the balance of the course). Show the response of mysql to a request to describe each of your relation schemas. For example, to see the schema for relation Foo type:

Answer：





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DESCRIBE Foo;

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1. **(10 pts.)** Execute about five INSERT commands to insert tuples into one of your relations. Show the response of mysql and the relation that results when you issue a SELECT \* command. Again, the information on how to do this step is in Getting Started With mySQL.

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Don't forget to save a copy of your PDA for reference as you do Step 3 of the PDA.