

CS-133 — Database and Knowledgebase Systems

Homework 5: SQL

Due 5:00pm, Friday March 24, 2000

The purpose of this homework is to give you practice with SQL.

The assignment is to provide SQL queries for problems 1a – 1j, 2a, and 2b of Homework 2. For each problem, include both the query and the system output. You should also include the queries/commands you use to create the tables and populate them with data.

The problems are:

1. Use the animal shelter database to construct the following relations:
 - (a) All pets adopted by John and their types.
 - (b) Names of all cats in the shelter.
 - (c) Names of all adopted cats in the shelter.
 - (d) Telephone numbers of owners who adopted cats.
 - (e) Names of owners who adopted short-hair stray cats.
 - (f) Names and telephone numbers of owners whose pets are not fixed yet.
 - (g) Names of owners who adopted two or more pets of the same type.
 - (h) Print the number of cats that John has adopted.
 - (i) Names of owners who adopted both cats and dogs.
 - (j) Names of owners who adopted at least one of each type of animal in the shelter.
2. Given the **parent**(pname,cname) relation, construct queries which return relations for:
 - (a) **grandparent**(gpname,gcname)
 - (b) **greatgrand**(ggpname,ggcname)