Problem Set 6

Cs437 Fall 2014

1. **Database Security**

Consider the following sequence of actions, where p is a privilege on table R and A is the owner of R.

(a) GRANT p to B WITH GRANT OPTION (executed by A)

(b) GRANT p to C (executed by A)

(c) GRANT p to D WITH GRANT OPTION (executed by B)

(d) GRANT p to B,C,E WITH GRANT OPTION (executed by D)

(e) REVOKE p from D CASCADE (executed by B)

(f) REVOKE p to C CASCADE (executed by A)

Show the authorization graphs after steps 3,4,5, and 6. For each of these four steps, also specify which users hold p with and without grant option.

1. **Texttbook Problem 21.2**