**CSCI 530 Lab - Authorization**

Question 1

baseline case:

|  |  |  |  |
| --- | --- | --- | --- |
|  | bill | mary | joe |
| strategies | Yes.  “strategies” is readable for members of group “executives,” of which bill is a member. | No.  “strategies” is only readable for its owning group “executives” and its owner “root.” “mary” doesn’t satisfy these requirements. | No.  “strategies” is only readable for its owning group “executives” and its owner “root.” “joe” doesn’t satisfy these requirements. |
| salaries | No.  “salaries” is only readable for its owning group “humanresources” and its owner “root.” “bill” doesn’t satisfy these requirements. | Yes.  “salaries” is readable for members of group “humanresources,” of which mary is a member. | No.  “salaries” is only readable for its owning group “humanresources” and its owner “root.” “joe” doesn’t satisfy these requirements. |
| workschedule | Yes.  “workschedule” is readable for every user. | Yes.  “workschedule” is readable for user. | Yes.  “workschedule” is readable for every user. |

modified case:

|  |  |  |  |
| --- | --- | --- | --- |
|  | bill | mary | joe |
| strategies | Yes.  “strategies” is readable for members of group “executives,” of which bill is a member. | No.  “strategies” is only readable for its owning group “executives,” its owner “root,” and user joe. “mary” doesn’t satisfy these requirements. | Yes.  “joe” is added to strategies’ ACL with read permission. |
| salaries | Yes.  The group executives is added to salaries’ ACL with read permission, of which bill is a member. | Yes.  “salaries” is readable for members of group “humanresources,” of which mary is a member. | Yes.  “joe” is added to salaries’ ACL with read permission. |
| workschedule | Yes.  “workschedule” is readable for every user. | Yes.  “workschedule” is readable for every user. | Yes.  “workschedule” is readable for every user. |

1. Above you wrote predictions in the grids for both the baseline "before" case and the modified "after" case following creation of an ACL. Then you tested them. Maybe all your predictions were right, maybe not. Now, go ahead and change the predictions (in the tables above), as needed, to reflect the actual empirical outcomes you saw. "Yes" or "no" should appear in each cell. In each, under "yes" or "no," write the very brief reason for that outcome. Do this for both of the grids appearing above.

2. When you assigned identical passwords to bill, mary, and joe, different content appeared for each user in the /etc/shadow file where passwords are stored. Why?

The stored password is different for each user because it is generated by hashing the combination of a salt and the original password, and the salt is different for each user.