Data Security HW 5

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Homework:

1. We discussed access control lists (ACLs) and capabilities (aka C-lists).

a. Give two advantaged of capabilities over ACLs.

* You know what each subject could have access to with capabilities
* Capabilities allows users to lend out to other users, unlike ACLs

b. Give two advantages of ACLs over capabilities

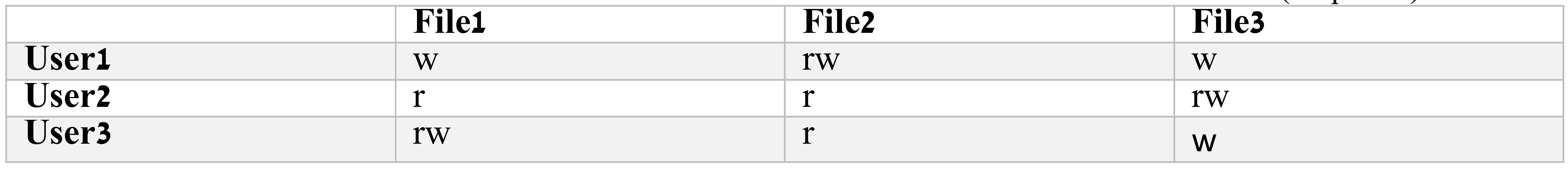
* For capabilities if the files change then you will need to keep adding files to the user so that isn’t practical, therefore it would be easier to use an ACL
* ACLs can be stored with files in a filesystem very easily

2. Explain what kind of access policy is used by SEAndroid

* They use MAC, which means that only the company can control access. It accomplishes this by referring to security policies that are preinstalled containing a set of access control rules.

3. Solve 3.4 in the example

1. Given that the level of User2 is the highest. Does the matrix describe a valid MLS system? Which one? Explain Your answer



* The above matrix isn’t a valid MLS system as it seems more discretionary because User2 should have the greatest access to all the files. The only file that would follow MLS system is File3.