Task 1. Figure out what security precautions are already used in your “dvdrental” database. Prepare description

I used: SELECT \* FROM pg\_roles; command.

Column Names and Their Meanings:

1. rolname - The name of the role.
2. rolsuper - Indicates whether the role is a superuser(has all privileges) or not.
3. rolinherit - Indicates whether the role inherits the privileges of roles it is a member of.
4. rolcreaterole - Indicates whether the role has the privilege to create other roles.
5. rolcreatedb - Indicates whether the role can create databases.
6. rolcanlogin - Indicates whether the role is allowed to log in to the database.
7. rolreplication - Indicates whether the role has replication privileges, which is important for database replication.
8. rolconnlimit - Specifies the maximum number of concurrent connections the role can have.

-1 means there is no limit on the number of connections.

1. rolpassword - The password associated with the role, if any.
2. rolvaliduntil - Shows the expiration date of the role's password, if any.
3. rolbypassrls - Indicates whether the role can bypass Row-Level Security policies.
4. rolconfig - This is a list of role-specific configuration settings for the role. It can include custom settings that override the database's default behavior.
5. oid - The Object Identifier (OID) for the role.

Roles and Permissions in dvdrental Database:

1. pg\_database\_owner - Full control over the database but cannot log in.
2. pg\_read\_all\_data - Grants read-only access to all data in the database, but cannot log in.
3. pg\_write\_all\_data - Grants write access to all data in the database but cannot log in.
4. pg\_monitor - Access to monitoring tools and database statistics but cannot log in.
5. pg\_read\_all\_settings - Grants access to view all settings of the database but cannot log in.
6. pg\_read\_all\_stats - Grants access to view database statistics, but cannot log in.
7. pg\_stat\_scan\_tables - Grants access to scan tables for stats , but cannot log in.
8. pg\_read\_server\_files - Grants access to read server files stored outside the database, but cannot log in.
9. pg\_write\_server\_file - Grants access to write server files, but cannot log in.
10. pg\_execute\_server\_program - Grants ability to execute server-side programs, but cannot log in.
11. pg\_signal\_backend -Allows sending signals to backend processes, such as restarting a process, but cannot log in.
12. pg\_checkpoint - Allows performing checkpoint operations, but cannot log in.
13. pg\_use\_reserved\_connections - Allows using reserved connections for maintenance tasks, but cannot log in.
14. pg\_create\_subscription - Grants the ability to create database subscriptions for logical replication, but cannot log in.
15. postgres - The superuser role with full access to the database, including the ability to log in and perform any operation.