## How do HTTP applications preserve the state of an application across multiple request-response cycles, especially concerning user authentication and session management?

A web session is a sequence of network HTTP request and response transactions associated with the same user. Web applications can create sessions to keep track of anonymous users after the very first user request. An example would be maintaining the language preference. Additionally, web applications will make user of sessions once the user has authenticated. This ensures the ability to identify the user on any subsequent requests as well as being able to apply security access controls, authorized access to the user private data, and to increase the usability of the application. Therefore, current web applications can provide session capabilities both pre and post authentication.

Once an authenticated session has been established, the session ID (or token) is temporarily equivalent to the strongest authentication method used by the application, such as username and password, passphrases, one-time passwords (OTP), client-based digital certificates, smartcards, or biometrics (such as fingerprint or eye retina)

## Investigate and document the procedures for performing Django database migrations to a server-based relational database like MariaDB

1. Create Django project
2. Create database settings in settings.py
3. Install MariaDB
4. Use CD to locate DB
5. Use -uroot to open sql command prompt
6. Create the database, users, privilege
7. Perform database migrate
8. Can use SHOW TABLES to check tables are created