1. (30 pts) The redis commands that you would use to interact with your specific Redis structures.

**Current Logged-in Users: This section covers the Redis commands for handling user sessions within the application.**

* **Initialize: Clear all logged-in users to start anew: FLUSHALL**
* **Create/Update: Record or update a user's session when they log in: HSET logged\_in\_users session\_token123 user\_id42**
* **Read: Fetch the user ID that corresponds to a session token: HGET logged\_in\_users session\_token123**
* **Delete: Erase a user's session upon logging out: HDEL logged\_in\_users session\_token123**

**Active Goals: The following commands are used for managing the goals that users aim to achieve.**

* **Initialize: Remove all goals for a user, possibly at the beginning of a new cycle: DEL active\_goals:user\_id**
* **Create: Insert a new goal for a user with its deadline: ZADD active\_goals:user\_id 1640995200 goal\_id15**
* **Read: Obtain a list of all active goals for a user: ZRANGE active\_goals:user\_id 0 -1 WITHSCORES**
* **Update: Modify the deadline of an existing goal: ZADD active\_goals:user\_id 1640995300 goal\_id15**
* **Delete: Discard a goal that has been achieved or is no longer relevant: ZREM active\_goals:user\_id goal\_id15**

**Recent Activities: This section describes how to manage a log of a user's recent activities.**

* **Initialize: Purge the record of recent activities for a user: DEL recent\_activities:user\_id**
* **Create: Add a new activity to a user's log: LPUSH recent\_activities:user\_id activity\_id88**
* **Read: Retrieve the list of a user's recent activities: LRANGE recent\_activities:user\_id 0 -1**
* **Delete: Keep the list at a fixed size by removing the oldest activities: LTRIM recent\_activities:user\_id 0 99**

**Dietary Intakes: Here are the commands for recording and managing dietary intakes for each user.**

* **Initialize: Clear the dietary intake log for a user on a specified date: DEL diet:user\_id:2024-04-15**
* **Create: Log a new dietary intake event: SADD diet:user\_id:2024-04-15 "Breakfast:Oatmeal:300"**
* **Read: Gather all dietary intake records for a user for a particular date: SMEMBERS diet:user\_id:2024-04-15**
* **Delete: Remove a particular meal from the dietary record: SREM diet:user\_id:2024-04-15 "Breakfast:Oatmeal:300"**

**Medication Schedules: This final section deals with the scheduling and management of medication reminders.**

* **Initialize: Erase the medication schedule for a user: DEL medication\_schedule:user\_id**
* **Create: Set up a new medication reminder for a user: ZADD medication\_schedule:user\_id 1641000000 reminder\_id27**
* **Read: Access all medication reminders for a user, sorted by the next intake time: ZRANGE medication\_schedule:user\_id 0 -1 WITHSCORES**
* **Update: Adjust the time for an upcoming medication intake: ZADD medication\_schedule:user\_id 1641000050 reminder\_id27**
* **Delete: Cancel a medication reminder: ZREM medication\_schedule:user\_id reminder\_id27**