Description of the business problems being addressed by our database:
Fitness Application which allows users to track their activities and perform exercises with customized control.
Users have the ability to design workout sessions that are tailored to their specific needs, set fitness objectives, diet plan, meal plan and associate exercises with each workout session. There are training details (such as sets) associated with each activity. Users can engage in group activities, and showcase their accomplishments to the community.

Entities

1. User:
   Attributes: UserID, name, gender,age,email_id,password
2. Fitness goals:
   Attributes: GoalID, description,target_date,target_calories
3. Community:
   Attributes: Community_ID, posts, content, post_date
4. Progress Report:
   Attributes: Report_ID, date, weight, height, body_fat_percentage
5. Diet Plan:
   Attributes: PlanID, Planname, PlanDescription, nutrientvalue
6. Meal Plan
   Attributes: MealID, date, time, total_calories
7. Workout Info:
   Attributes: weights, sets, repetitions
8. Exercise:
   Attributes: ExerciseID, name, description
9. Group Activity:
   Attributes: ActivityID, name, description, category
10. Daily Workout:
    Attributes: PlanID, name, description
11. Workout session:
    Attributes: SessionID, date, time_start, time_end

Relationships:

- A user can have multiple goals (one-to-many relationship between User and Fitness Goals)
- A user can have multiple workout sessions per day/week (one-to-many relationship between User and Workout Session)
- A workout session can have multiple exercises associated with it (one-to-many relationship between Workout Session and Exercise)
- A user can have multiple diet plans according to their requirements (one-to-many relationship between User and Diet Plan)

- A diet plan can have multiple meal plans (one-to-many relationship between Diet Plan and Meal Plan)
- A workout session includes multiple workout info like weights, sets, repetitions etc (one-to-many relationship between Workout Session and Workout Info)
- A user stores their progress report with data like date, weight, height etc (one-to-many relationship between User and Progress Report)
- A community has multiple posts and content (one-to-many relationship between Community and Posts)

ERD DIAGRAM: