Problem Statement:

As a Product Manager at Wysa, I would like to start a new service called Perceived Energy score. In order to generate the score, I want to analyse user's check in for mood (mood score) and their level of activity based on steps/active minutes, sleep which is piped through from Google Fit / Fitbit / Apple Watch.

Build a mongodb aggregate pipeline to fetch the mood score, activities and sleep of all the users who have been active on a certain day. Share the mongodb aggregate pipeline and the result with us.

Collections -
1. User
2. Mood
3. Activity
4. Sleep

Just to get you started, here are some assumptions (feel free to add/modify/remove) -

1) User collection would have the following keys -
```
{
        "_id": ObjectId("a"),
        "name": "brad",
        "timezone": "Americas/Los Angeles",
        "version": 70,
        "app": "Wysa",
        "country": "US"
        "createdAt": ISODate("2021-11-18T15:56:11.553Z"),
        "updatedAt": ISODate("2021-11-18T15:56:46.392Z"),
}
```

2) User Mood collection would be something like below -
```
{
        "_id" : ObjectId("ds"),
        "field" : "mood_score",
        "user" : ObjectId("a"),
        "value" : 8, // mood_score is stored as a scale of 1-10
        "createdAt" : ISODate("2021-11-18T11:24:25.466Z"),
        "updatedAt" : ISODate("2021-11-18T11:24:25.466Z")
}
```

3) Activity collection -

```
// Attached CSV


Fetch the following -
```

```
        Start Time, Duration (EndTime-StartTime), Activity, LogType, Steps. Distance
        and Calories
```

4) Sleep collection -

```
        // Attached CSV


        Fetch the following -
        StartTime (Duration in Bed part 1), Sleep score, Hours of Sleep, Hours in Bed
        (Duration in Bed part 2 - Duration in Bed part 1)
```

Final result would look something like -

```
        {
                user: ObjectId("aeskvca3asdasjlbdu3rt97wer"),
                date: ISODate("2021-11-18T00:00:00.000Z"),
                mood_score: 8,
                {
                activity: [
                        {
                                activity: "run",
                                steps: 6250,
                                distance: 5, //kms
                                duration: 42, //mins

                                …
                        },
                        {
                                name: "swim",
                                distance: 200, //meters
                                duration: 40 //mins
                        }
                ]
                },
                {
                sleep: {
                        sleep_score : 80,
                        hours_of_sleep: 08:32:00,
                        Hours_in_bed: 09:00:00
                }
                }
        }
```