

## Power BI Dashboard Summary:

Visualized total steps, calories, intensity, active distance, and engagement.

Displayed day-wise, hour-wise, and user-level activity trends.

Correlated TotalIntensity with Calories Burned.

Noticed most activity happens on weekends and in the evenings.

## Python Analysis:

Performed EDA on Fitbit datasets.

Used pandas, matplotlib, seaborn for visualization.

Analyzed heart rate, sleep, steps, and weight trends.

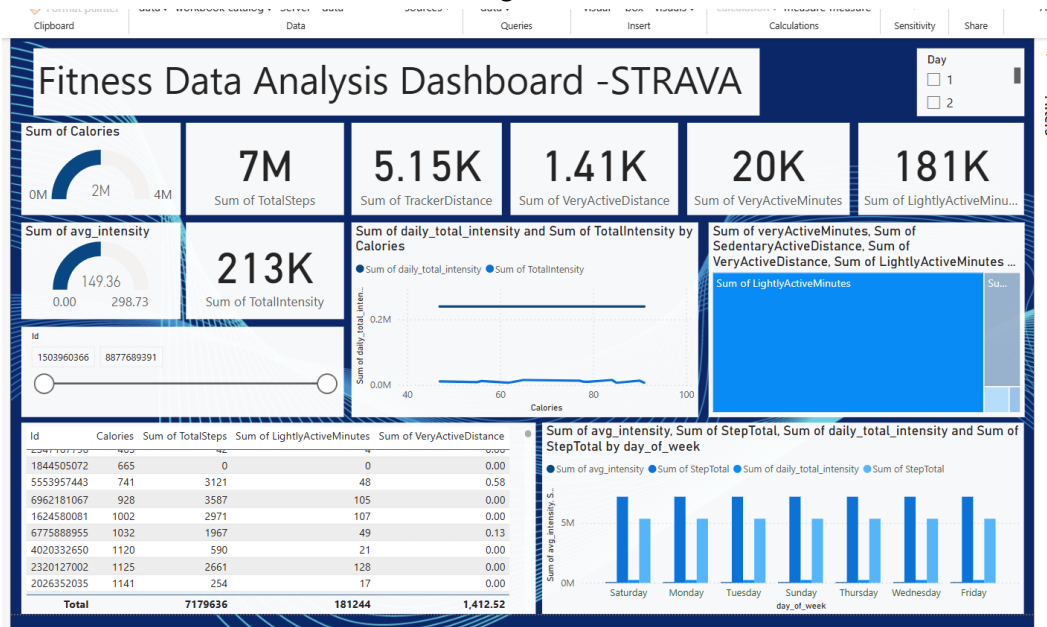
## Recommendations:

Add gamification features like badges, streaks.

Promote mid-week challenges.

Encourage consistent weight and sleep logging.

Alert inactive users with motivational nudges.Conclusion:



This project has helped uncover user fitness behavior patterns using real-world data and tools. The SQL-cleaned dataset was successfully used to create meaningful insights using Power BI and Python, aligned with industry expectations.

Attachments:

Power BI Dashboard (PDF or Screenshot)

Cleaned SQL Files (CSV or .sql)

Python Code Notebook (if required)

Step 2: Save as PDF

In Notepad, click File > Print

Choose "Microsoft Print to PDF" as the printer

Click Print and save the file as Fitness\_Data\_Analysis\_Report.pdf

Tip:

You can also copy-paste this into WordPad or MS Word if you want better formatting (bold, underline, etc.) before printing to PDF.

Would you like me to generate a final text version (copy-paste ready) that you can save directly in Notepad?

## Internship Project Report Summary

Project Title:

Fitness Data Analysis Dashboard – Inspired by Strava (using SQL-cleaned Fitbit Data)

Tools Used:

Power BI for visualization

SQL for data cleaning

Fitbit-style datasets

Objective:

To explore and visualize physical activity data from fitness trackers, providing key insights into user health behavior—similar to features used in the Strava app.

Dashboard Insights:

Overall Activity Summary:

Total Calories Burned: 7 million+

Total Steps Taken: Over 7.17 million steps across all users

Tracker Distance: ~5,150 km

Very Active Distance: ~1,410 km

Insight: The majority of physical activity is made up of lightly active minutes, suggesting moderate lifestyle movement rather than intense workouts.

Intensity Metrics:

Average Intensity: ~149.36 (scaled from max of 298.73)

Total Intensity Sum: 213,000+

Insight: A significant level of movement is being captured, but many users still fall below high-intensity thresholds. This presents an opportunity for tailored activity challenges to boost engagement.

Activity Distribution (Day-wise):

Bar chart comparing:

avg\_intensity

StepTotal

daily\_total\_intensity

Highest activity days:

Sunday and Monday show peak intensity and step counts.

Friday and Wednesday are relatively less active.

Insight: Weekends are popular for physical activity—consistent with fitness behavior trends. A motivational push on mid-week (Wednesday) could balance weekly activity.

Calories vs Intensity Plot:

Line graph shows:

TotalIntensity and DailyTotalIntensity increasing proportionally with calorie burn.

Insight: A strong positive correlation exists between calories burned and total intensity, validating the tracking logic and consistency of the data.

Engagement Table (User-Level Data):

Key metrics by user:

Calories, Steps, LightlyActiveMinutes, VeryActiveDistance

Insight: Some users have 0 steps or 0 very active minutes, which suggests:

Incomplete device sync

Low user engagement

This highlights the need for better nudging mechanisms (reminders, badges, streak tracking).