













Distance Vs
Steps Vs
Calories by Days

Steps Vs Heart rate Daily Intensities by Days Daily Intensities & Heart Rate by days Steps Vs
Calories vs
Heart rate by time

**Conclusions** 





940
user\_participation\_cnt

863

Active\_users

7M

Total\_steps

Total\_calories\_burn

73.00

Avg\_heart\_rate

	User_id	~	day	~ )
L	All		All	
	12-04-2016 🛅	12-05-2016 🛗	day_type	~
Ц	12 04 2010 000	12 03 20 10	All	$\sim$













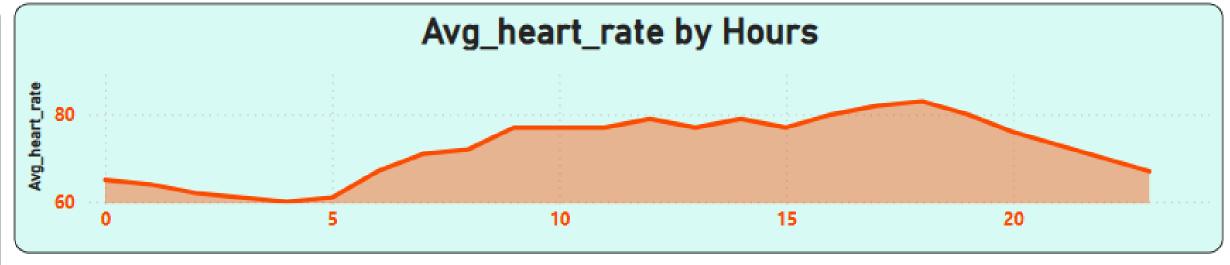
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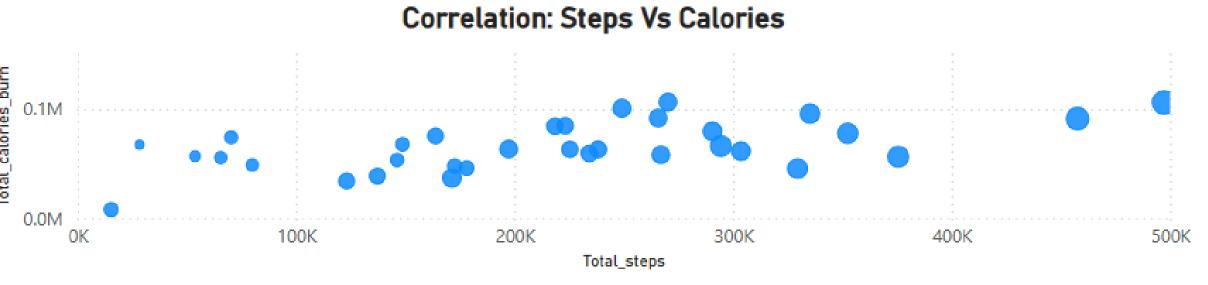
iii				Ting the state of
day	Active_users	Total_steps	Total_distance_km	Total_calories_burn
Mon	110	9,33,704	666.35	2,78,905
Tue	138	12,35,001	886.50	3,58,114
Wed	139	11,33,906	823.25	3,45,393
Thu	133	10,88,658	780.90	3,23,337
Fri	120	9,38,477	669.05	2,93,805
Sat	113	10,10,969	725.98	2,92,016
Sun	110	8,38,921	608.29	2,73,823
Total	863	71,79,636	5,160.32	21,65,393

day	Active_users	Avg_Steps	Avg_distance_km	Avg_calories_burn
Mon	110	8,488.22	6.06	2,535.50
Tue	138	8,949.28	6.42	2,595.03
Wed	139	8,157.60	5.92	2,484.84
Thu	133	8,185.40	5.87	2,431.11
Fri	120	7,820.64	5.58	2,448.38
Sat	113	8,946.63	6.42	2,584.21
Sun	110	7,626.55	5.53	2,489.30
Total	863	8,319.39	5.98	2,509.15

day	users_0_steps_cnt
Mon	10
Tue	14
Wed	11
Thu	14
Fri	6
Sat	11
Sun	11
Total	77

ActivityDate	ld •	Avg_heart_ rate
2016-04-12	2022484408	72.00
2016-04-13	2022484408	76.00
2016-04-14	2022484408	70.00
2016-04-15	2022484408	76.00
2016-04-16	2022484408	71.00
2016-04-17	2022484408	80.00
2016-04-18	2022484408	77.00
2016-04-19	2022484408	78.00
2016-04-20	2022484408	78.00
2016-04-21	2022484408	80.00
2016-04-22	2022484408	74.00
2016-04-23	2022484408	70.00
2016-04-24	2022484408	76.00
Total		73.00







7M

Total\_steps Total\_calories\_burn

2M 73.00

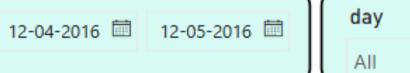
Avg\_heart\_rate

77

users\_0\_steps\_cnt

1.41K

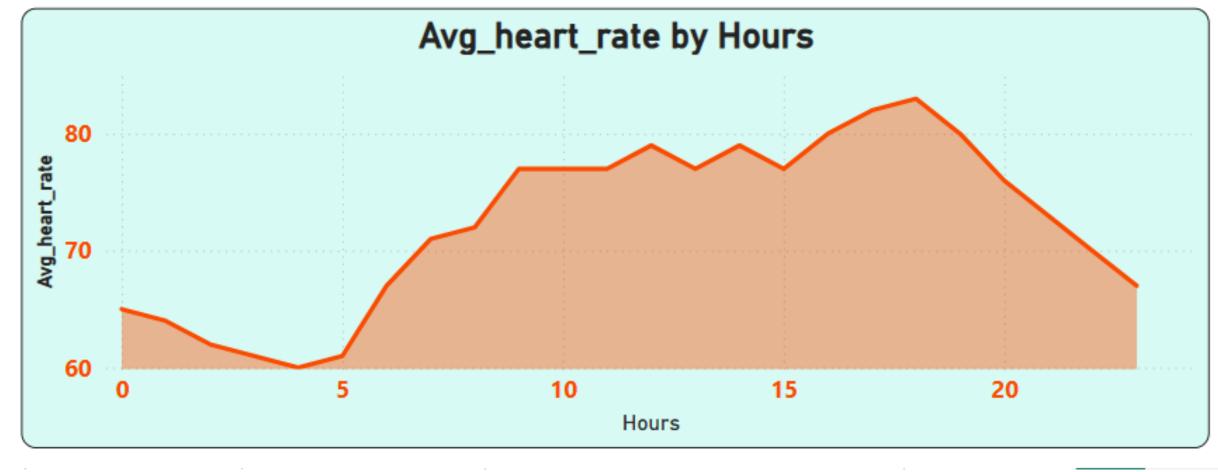
Active\_walk\_km



day	Id	users_0_steps_cnt ▼
Mon	1844505072	3
Mon	8792009665	3
Wed	1927972279	3
Wed	4020332650	3
Thu	1927972279	3
Tue	1844505072	2
Tue	1927972279	2
Tue	4020332650	2
Total		77

day	user_participation _cnt	Active_users	users_0_steps_cnt	Total_steps	Total_calories_burn	Avg_Steps	Avg_calories _burn
Mon	120	110	10	9,33,704	2,78,905	8,488.22	2,535.50
Tue	152	138	14	12,35,001	3,58,114	8,949.28	2,595.03
Wed	150	139	11	11,33,906	3,45,393	8,157.60	2,484.84
Thu	147	133	14	10,88,658	3,23,337	8,185.40	2,431.11
Fri	126	120	6	9,38,477	2,93,805	7,820.64	2,448.38
Sat	124	113	11	10,10,969	2,92,016	8,946.63	2,584.21
Sun	121	110	11	8,38,921	2,73,823	7,626.55	2,489.30
Total	940	863	77	71,79,636	21,65,393	8,319.39	2,509.15

ActivityDate	Id	Avg_heart_rate	
2016-04-12	2022484408	72.00	
2016-04-13	2022484408	76.00	
2016-04-14	2022484408	70.00	
2016-04-15	2022484408	76.00	
2016-04-16	2022484408	71.00	
2016-04-17	2022484408	80.00	
2016-04-18	2022484408	77.00	
2016-04-19	2022484408	78.00	
2016-04-20	2022484408	78.00	
2016-04-21	2022484408	80.00	
2016-04-22	2022484408	74.00	
Total		73.00	

















7M

Total\_steps

5.16K

Total\_distance Km

Total\_active\_min

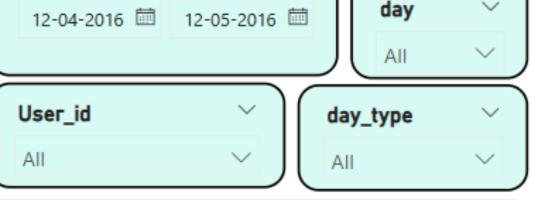
214K

932K

Sedentary\_min

73.00

Avg\_heart\_rate







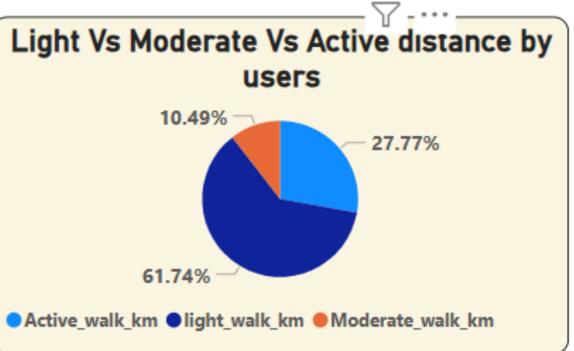


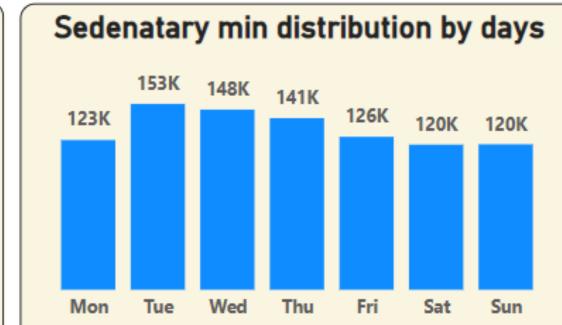


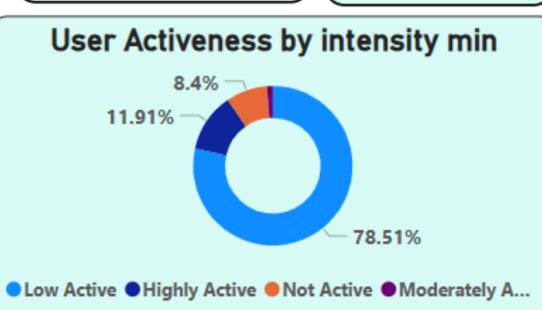




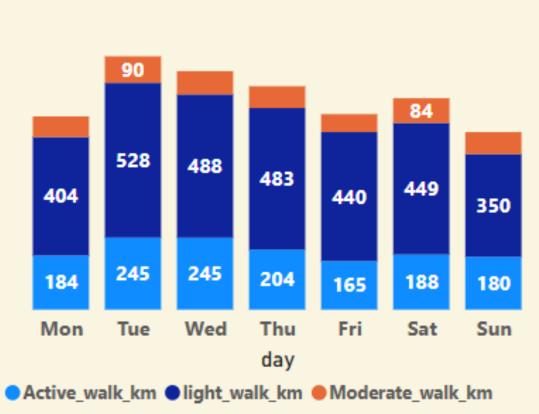


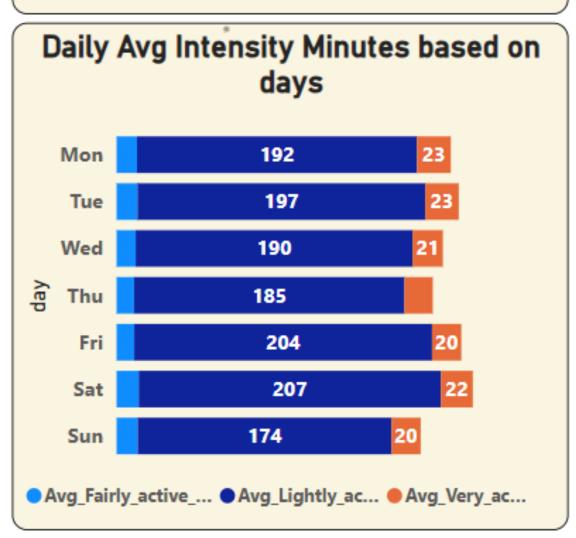


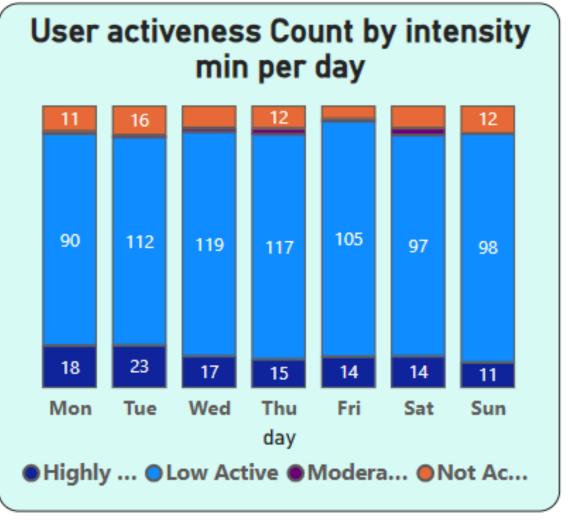














Total\_steps

## 5.16K

Total\_distance Km

214K

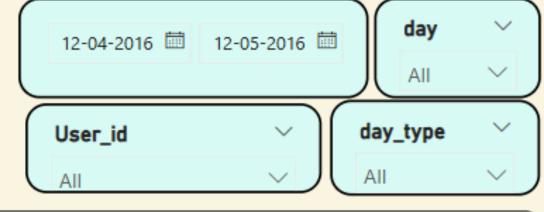
Total\_active\_min

932K

Sedentary\_min

73.00

Avg\_heart\_rate

















#### **Light Vs Moderate Vs Active** distance Km by day

day	Active_walk _km	light_walk _km	Moderate_walk _km
Mon	184.48	404	70.30
Tue	245.22	528	90.14
Wed	245.02	488	79.06
Thu	204.40	483	74.26
Fri	165.43	440	60.96
Sat	187.81	449	83.99
Sun	180.16	350	74.78
Total	1,412.52	3140	533.49

#### Daily Avg Intensity Minutes based on days

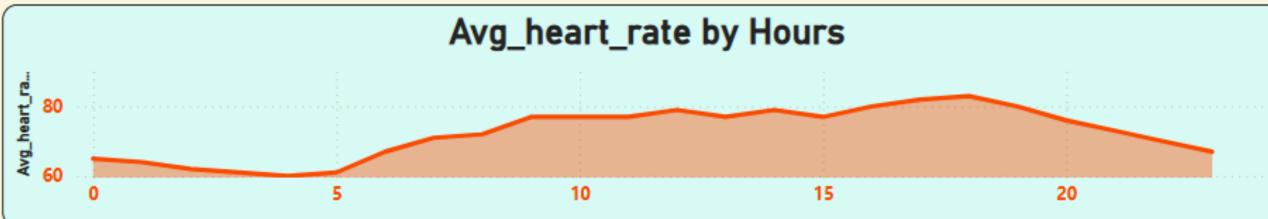
day	Avg_sedentary _min		Avg_Lightly _active_min	Avg_Very _active_ min
Mon	1,027.94	14.00	192.06	23.11
Tue	1,007.36	14.34	197.34	22.9
Wed	989.48	13.10	189.85	20.78
Thu	961.99	11.96	185.42	19.41
Fri	1,000.31	12.11	204.20	20.06
Sat	964.28	15.20	207.15	21.92
Sun	990.26	14.53	173.98	19.98
Total	991.21	13.56	192.81	21.16

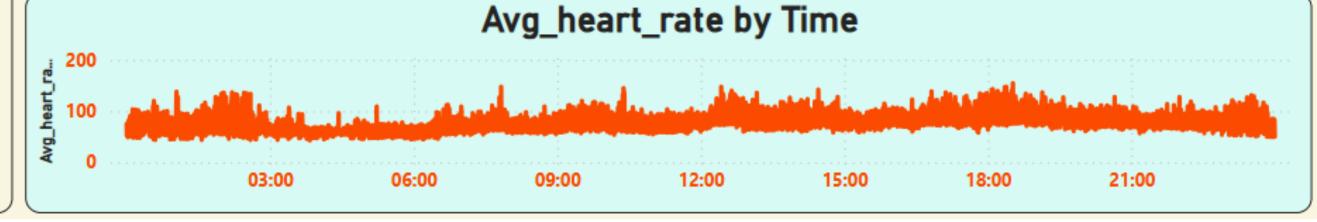
#### User activeness by intensity min per day

day	UserActivityCategory	user_participation_cnt
Mon	Highly Active	18
Mon	Low Active	90
Mon	Moderately Active	1
Mon	Not Active	11
Tue	Highly Active	23
Tue	Low Active	112
Tue	Moderately Active	1
Total		940

### Heart rate User\_id Rec

ActivityDate	Id	Avg_heart_
_		rate
2016-04-12	2022484408	72.00
2016-04-12	2347167796	82.00
2016-04-12	4020332650	87.00
2016-04-12	4558609924	76.00
2016-04-12	5553957443	62.00
2016-04-12	5577150313	60.00
2016-04-12	6962181067	77.00
2016-04-12	7007744171	95.00
2016-04-12	8792009665	66.00
2016-04-12	2277620301	74.00
Total		73.00







214.40K

8\_hourly\_avg\_steps

65.22K

6\_hourly\_avg\_calories

73.00

Avg\_heart\_rate



rate rec

4558609924







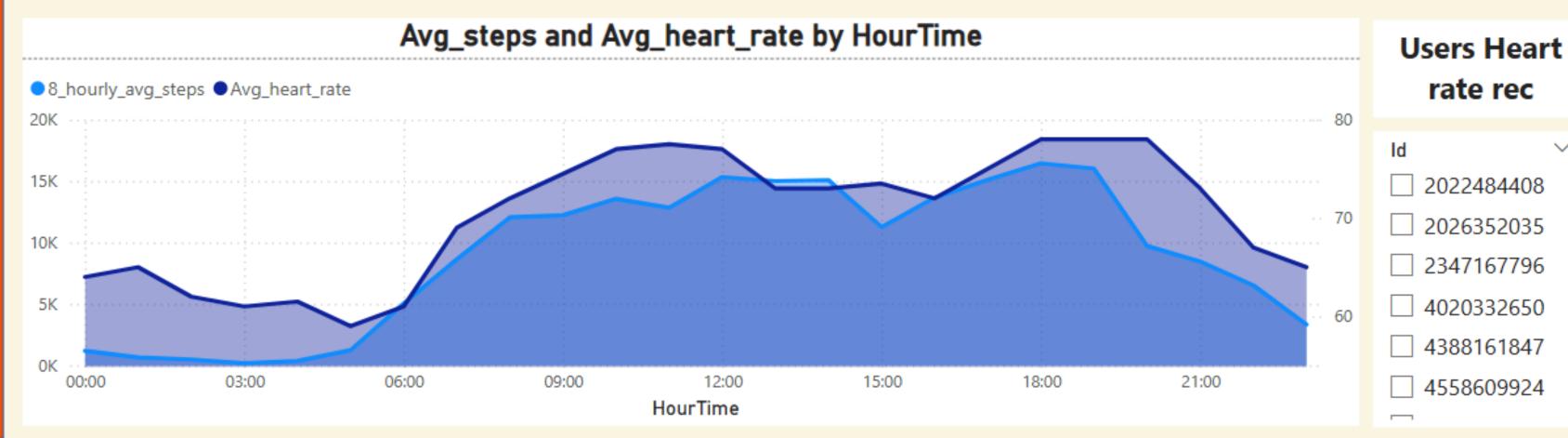




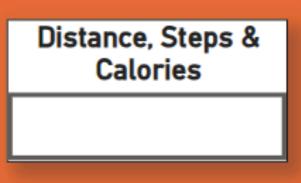








## **Insights Conclusion**



# Steps and heart rate

Daily Intensities

Steps, Distance & Heart rate by time

- Out of 940 users, 863 were active, contributing to over 7 million steps and 2 million+ calories burned during the month.
- There is a **positive correlation** between **steps and calories burned**, and **77 users** recorded **0 steps** on certain days, indicating potential inactivity or missing device data.
- Tuesday emerged as the most active day with 138 active users, 12.35 lakh steps, and 3.58 lakh calories burned.
- The average heart rate was 73 bpm, peaking between 10 AM to 6 PM, indicating higher exertion during active hours.
- Average steps per user per day is approximately 8,319, indicating a moderately active lifestyle among participants.
- **Saturday** showed the **highest average steps** (**8,946.63**) and **calorie burn** (**2,584.21**), suggesting weekends are more active for most users.
- Sedentary behavior is noticeable—77 instances of users logging zero steps, and some users had 100% sedentary minutes (1,440 mins/day), indicating no movement at all.
- Weekday vs. weekend behavior: Weekdays had a higher user participation rate, but weekends saw higher step averages and calorie burn, suggesting people may work out more when off duty.
- \*\* The majority of distance covered was through **Light Walks (61.74%)**, while **Active Walks** made up **27.77%** and **Moderate Walks** just **10.49%**, indicating a generally light activity trend.
- \*\*In terms of user activity classification, **78.51**% of users were categorized as **Low Active**, while only **11.91**% were **Highly Active**, showing a wide gap in fitness engagement.
- \*\*Tuesday recorded the highest active walking distance (528 km) and average intensity minutes (197), suggesting it was the most engaged day across the week.
- User activity peaked between 12:00 PM and 6:00 PM, with the highest average steps at 16,449.94 during 6:00 PM, showing this is the most active period.
- Very low activity was observed between 12:00 AM and 5:00 AM, with steps consistently below 1,200 and heart rate ranging between 61–64 BPM, indicating rest periods.
- The maximum calories burned was also recorded at 6:00 PM (3,390.42), indicating that evening hours are the most physically intense.
- W Heart rate steadily increases from 59.00 at 5:00 AM to a peak of 78.00 BPM between 6:00 PM and 9:00 PM, aligning with high