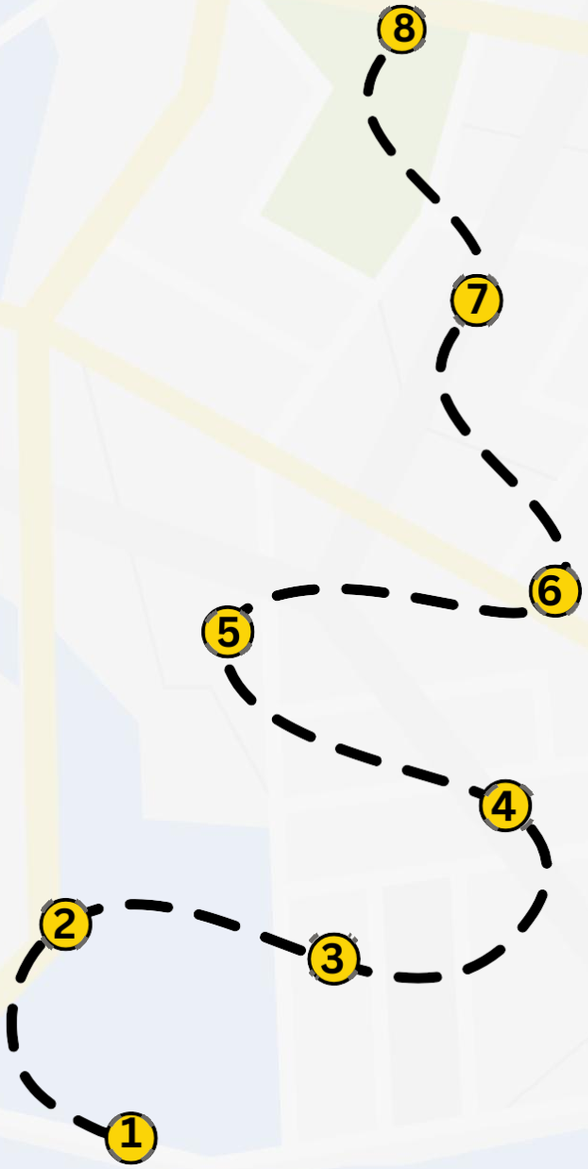


Questions

GoodCabs.

Month
All

passenger_type
new | repeated

Total trips
426K

TRIP RATIIO **0.71**
Trips Target % **99%**

total revenue
108M

Avg fare per trip **254.02₹**
Avg fare per km **13.28**
revenue Growth Rate Monthly **16.54%**

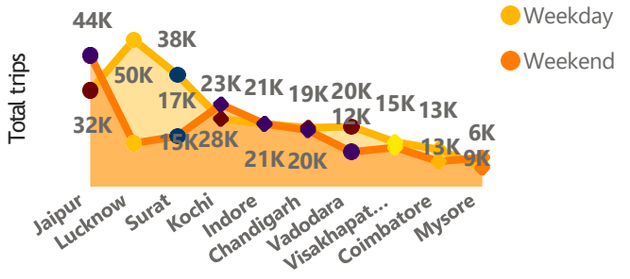
total Passengers
238K

new Passengers **177K**
repeat Passengers **61K**
Repeat passenger % **25.73%**

total distance travelled(KM)
8M

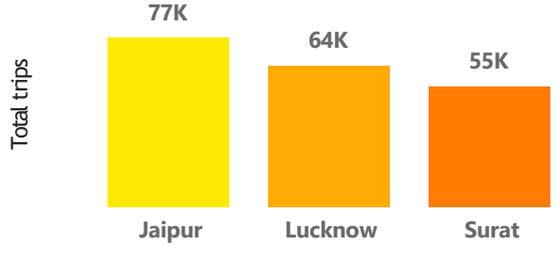
Avg trip distance **19.13**
max trip distance **45**
min trip distance **5**

Weekend Vs Weekday Trip Demand by city

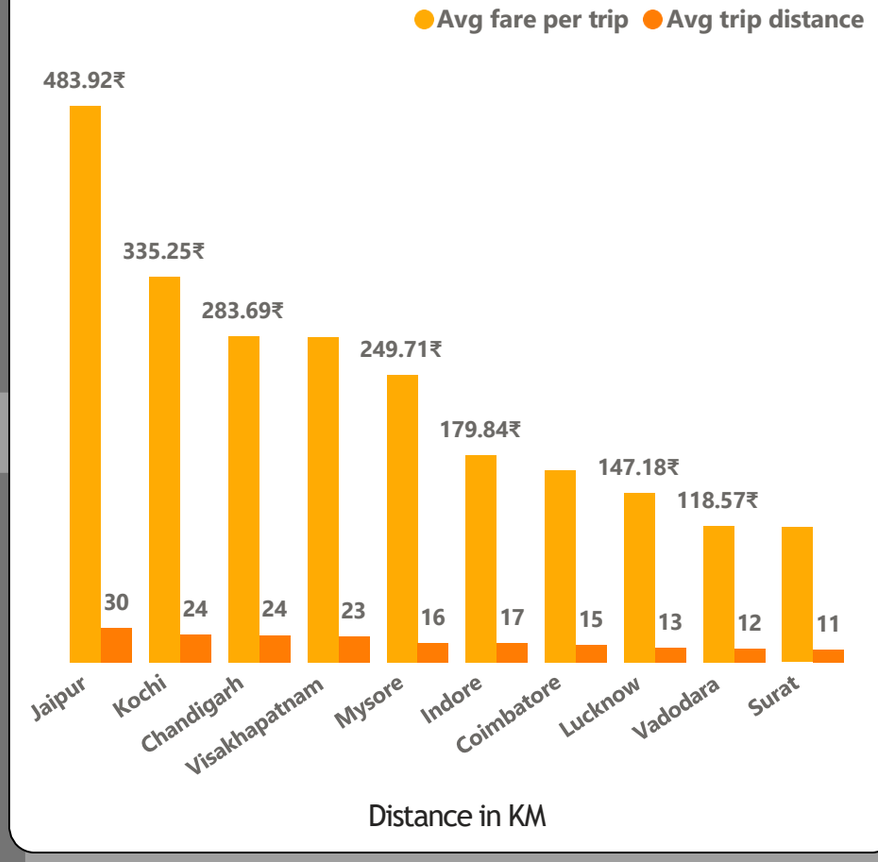


Top 3 | Bottom 3

Top 3 cities by total trips



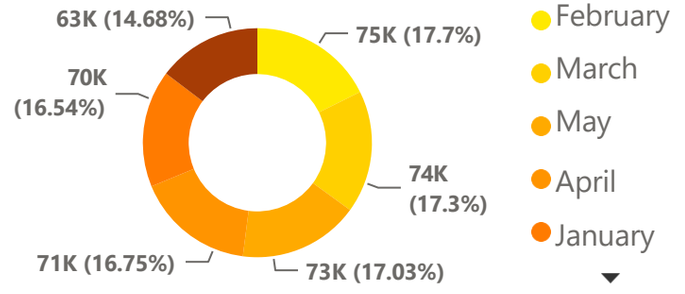
Avg fare per trip by city



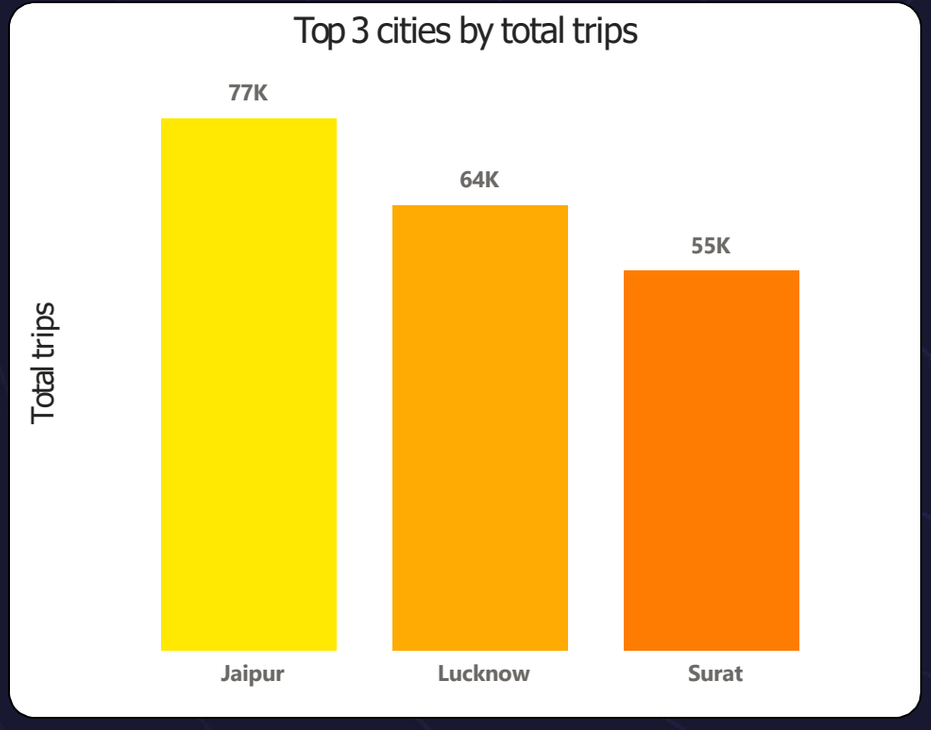
Peak and Low Demand Months by city

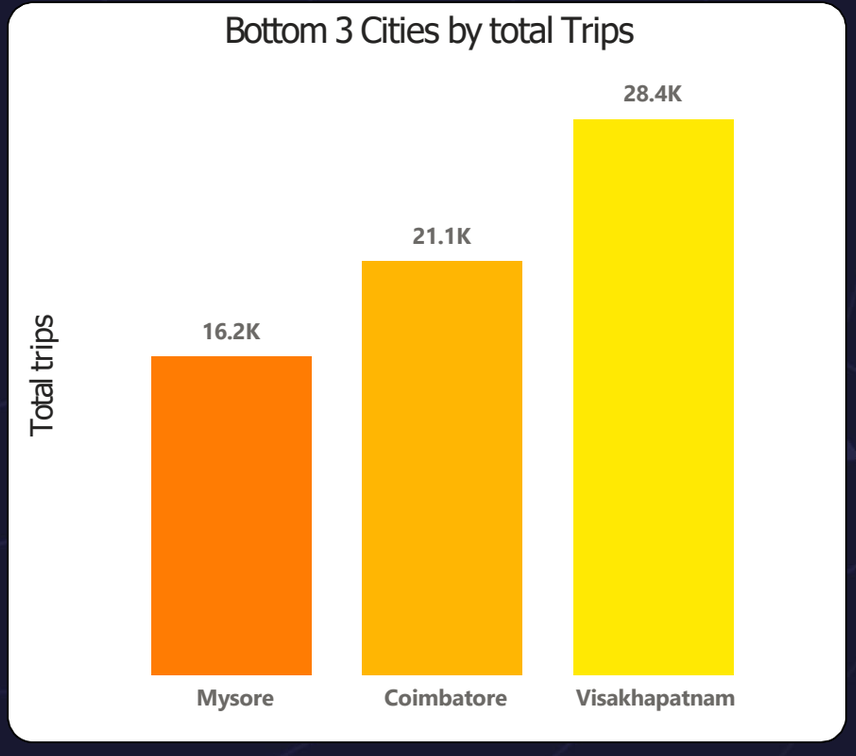
city_name	Peak demand month	low Demand month
Chandigarh	February	April
Coimbatore	March	June
Indore	May	June
Jaipur	February	June
Kochi	May	June
Lucknow	February	May
Mysore	May	January
Surat	April	January
Vadodara	April	June
Visakhapatnam	April	January

Total trips by months

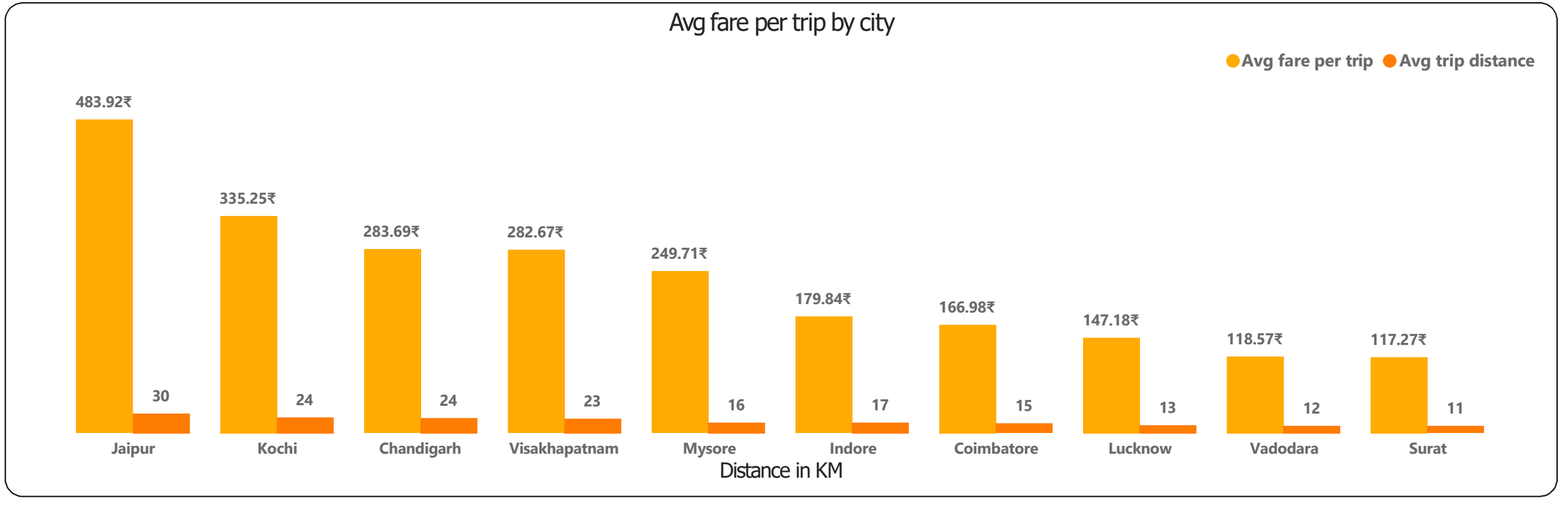


Q1. Identify the Top and Bottom 3 performing cities by total trips over the entire analysis period.

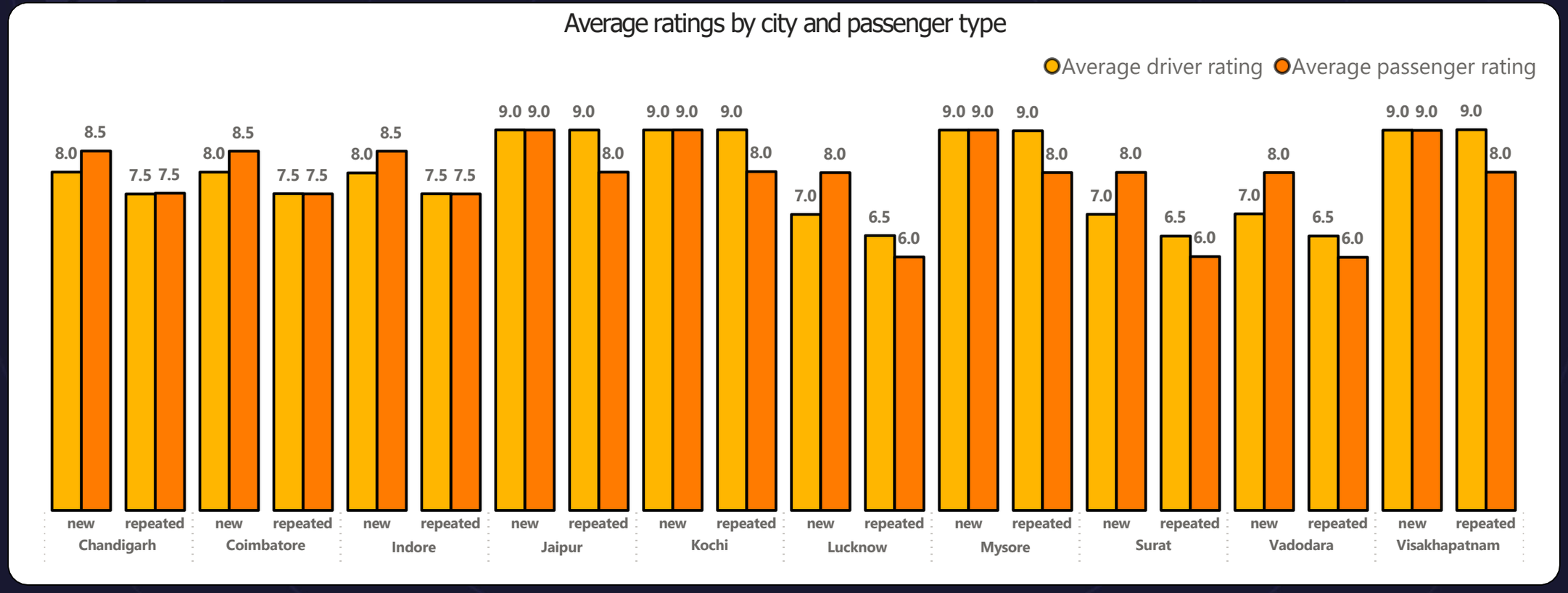




Q2. Calculate the average fare per trip for each city and compare it with the city's average trip distance. Identify the cities with the highest and lowest average fare per trip to asses pricing efficiency across locations.



Q3. Calculate the average passenger and driver ratings for each city ,segmented by passenger type (new vs repeat) . Identify the cities with the highest and lowest average ratings.

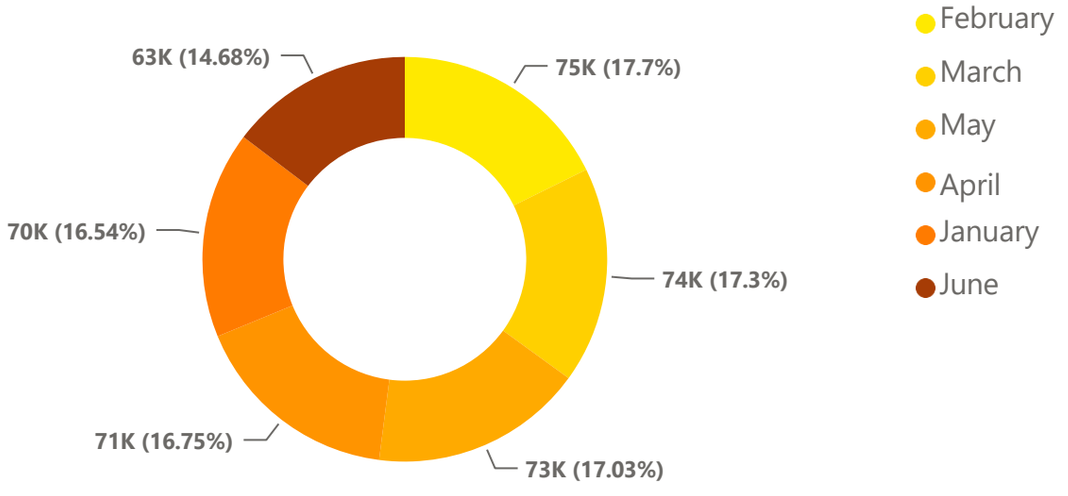


Q4. For each city, identify the month with the highest total trips and the month with the lowest total trips. This analysis will help good cabs to understand seasonal patterns and adjust resource accordingly

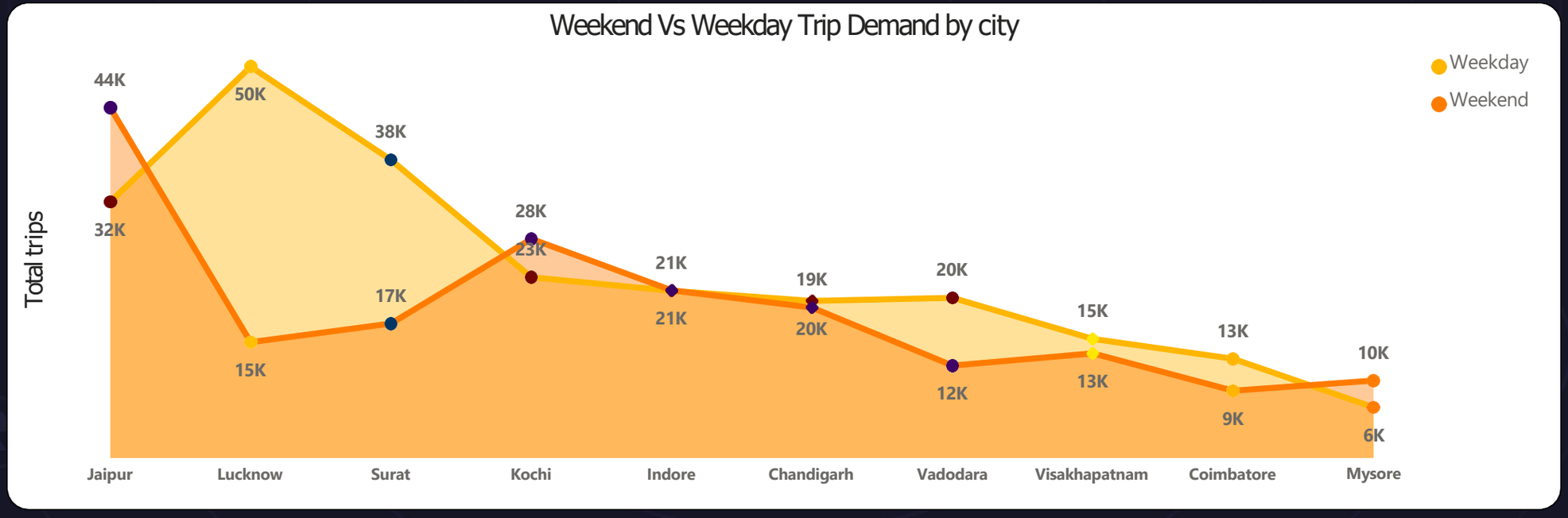
Peak and Low Demand Months by city

city_name	Peak demand month	low Demand month
Chandigarh	February	April
Coimbatore	March	June
Indore	May	June
Jaipur	February	June
Kochi	May	June
Lucknow	February	May
Mysore	May	January
Surat	April	January
Vadodara	April	June
Visakhapatnam	April	January

Total trips by months



Q5. Compare the total trips taken on weekdays versus weekends for each city over the six month period. Identify the cities with a strong preference for their weekend or weekday trips to understand demand variations.



Q6. Analyse the frequency of trips taken by repeat passengers in each city . Identify which city contributes most to higher trip frequencies among repeat passengers, and examine if there are distinguishable pattern between tourism focused and business focused cities

Repeat Passenger Frequency and City Contribution analysis

city_name	10-Trips	2-Trips	3-Trips	4-Trips	5-Trips	6-Trips	7-Trips	8-Trips	9-Trips
Chandigarh	1.79%	32.31%	19.25%	15.74%	12.21%	7.42%	5.48%	3.47%	2.33%
Coimbatore	1.22%	11.21%	14.82%	15.56%	20.62%	17.64%	10.47%	6.15%	2.31%
Indore	1.51%	34.34%	22.69%	13.40%	10.34%	6.85%	5.24%	3.26%	2.38%
Jaipur	0.97%	50.14%	20.73%	12.12%	6.29%	4.13%	2.52%	1.90%	1.20%
Kochi	0.81%	47.67%	24.35%	11.81%	6.48%	3.91%	2.11%	1.65%	1.21%
Lucknow	1.10%	9.66%	14.77%	16.20%	18.42%	20.18%	11.33%	6.43%	1.91%
Mysore	0.47%	48.75%	24.44%	12.73%	5.82%	4.06%	1.76%	1.42%	0.54%
Surat	1.35%	9.76%	14.26%	16.55%	19.75%	18.45%	11.89%	6.24%	1.74%
Vadodara	1.61%	9.87%	14.17%	16.52%	18.06%	19.08%	12.86%	5.78%	2.05%
Visakhapatnam	0.92%	51.25%	24.96%	9.98%	5.44%	3.19%	1.98%	1.39%	0.88%
Total	**1.20%**	**30.06%**	**19.17%**	**14.09%**	**12.42%**	**10.77%**	**6.73%**	**3.88%**	**1.68%**

Q7. For each city, evaluate monthly performance against targets for total trips, new passengers and average passenger ratings from targets. Determine if each metric met, exceed or missed the target, and calculate the percentage difference. Identify any consistent patterns in target achievement particularly across tourism versus business focused cities.

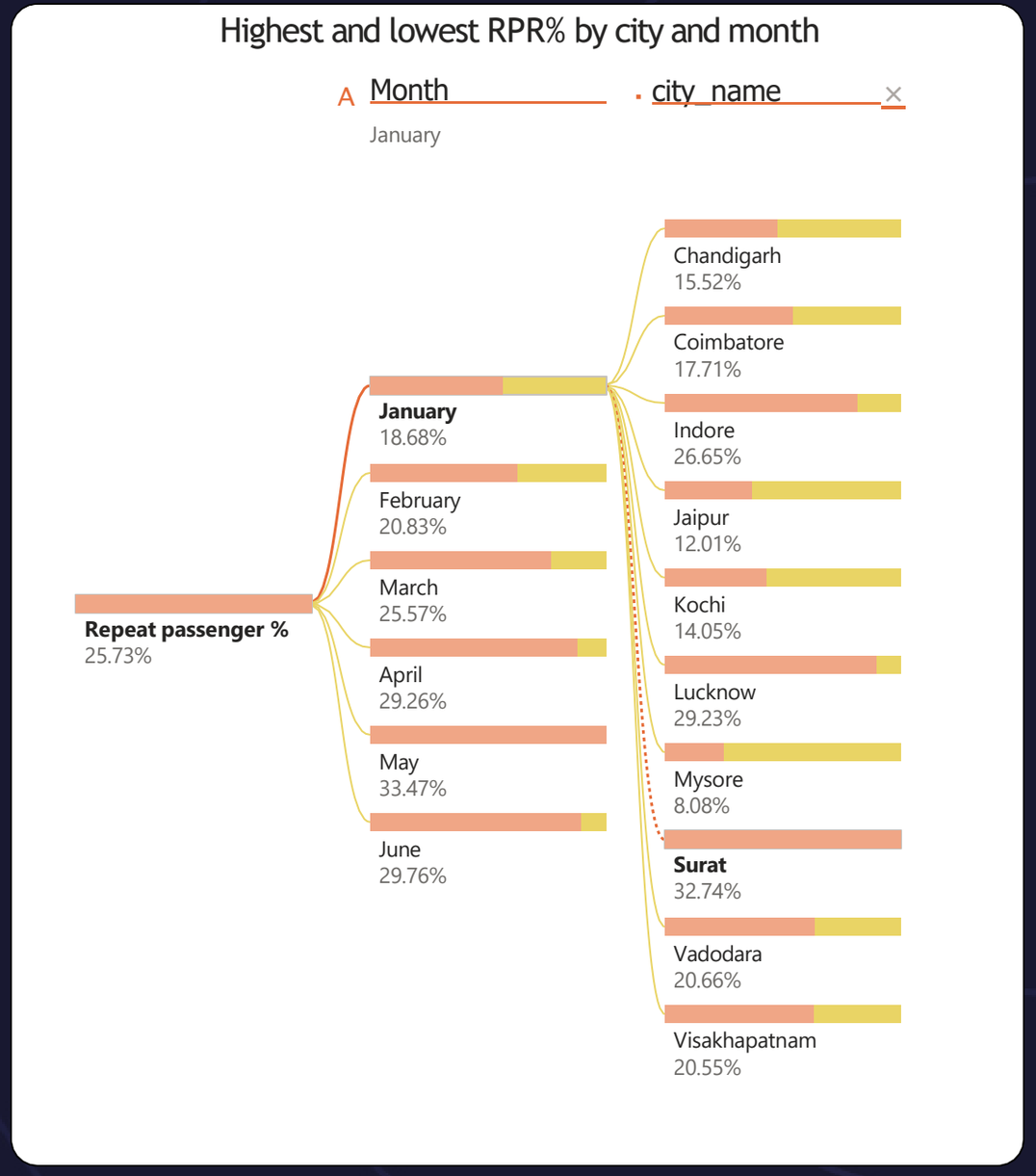
month_name	new Passenger	target_new_passengers	% diff new vs targer
April	1843	1500	22.87%
February	2254	2000	12.70%
January	2432	2000	21.60%
June	1540	1500	2.67%
March	1946	2000	-2.70%
May	1611	1500	7.40%
Total	**11626**	**10500**	**10.72%**

city_name

Chandigarh	Coimbatore	Indore
Jaipur	Kochi	Lucknow
Mysore	Surat	Vadodara

month_name	Average passenger rating	Average of target_rating	% diff passenger vs Target rating
April	6.37	7.00	-9.02%
February	6.49	7.00	-7.22%
January	6.58	7.00	-6.04%
June	6.36	7.00	-9.19%
March	6.40	7.00	-8.61%
May	6.33	7.00	-9.60%
Total	**6.42**	**7.00**	**-8.33%**

month_name	Total trips	TargetTrips	% difference
April	9831	10000	0.02
February	9069	9000	-0.01
January	8358	9000	0.07
June	8544	10000	0.15
March	9267	9000	-0.03
May	9774	10000	0.02
Total	**54843**	**57000**	**0.04**



Q8. Analyse the RPR% by city and month to determine which location have the strongest and weakest rates.

Adhoc Requests

Business Request - 1: City-Level Fare and Trip Summary Report

Generate a report that displays the total trips, average fare per km, average fare per trip, and the percentage contribution of each city's trips to the overall trips. This report will help in assessing trip volume, pricing efficiency, and each city's contribution to the overall trip count.

```sql
with cte as
(SELECT c.city_name,count(trip_id) as total_trip,
sum(fare_amount) as fare_amt,sum(distance_travelled_km) as total_dist
FROM trips_db.fact_trips f
join dim_city c on f.city_id=c.city_id
group by c.city_name)

select city_name,total_trip,round(fare_amt/total_dist,2) as avg_fare_per_km,
round(fare_amt/total_trip) as  avg_fare_per_trip,
round((total_trip/(select sum(total_trip) from cte)),2)*100
 as percentage_contibution_to_total_trips
from cte
group by city_name
```

city_name	total_trip	avg_fare_per_km	avg_fare_per_trip	percentage_contibution_to_total_trips
Visakhapatnam	28366	12.53	283	7.00
Chandigarh	38981	12.06	284	9.00
Surat	54843	10.66	117	13.00
Vadodara	32026	10.29	119	8.00
Mysore	16238	15.14	250	4.00
Kochi	50702	13.93	335	12.00
Indore	42456	10.90	180	10.00
Jaipur	76888	16.12	484	18.00
Coimbatore	21104	11.15	167	5.00
Lucknow	64299	11.76	147	15.00

Business Request - 2: Monthly City-Level Trips Target Performance Report

Generate a report that evaluates the target performance for trips at the monthly and city level. For each city and month, compare the actual total trips with the target trips and categorise the performance as follows:

- If actual trips are greater than target trips, mark it as "Above Target".
- If actual trips are less than or equal to target trips, mark it as "Below Target".

```
Limit to 1000 rows

with actual as
 (select t.city_id,c.city_name,monthname(t.date) as months,
 count(trip_id) as actual_trip from trips_db.fact_trips t
join trips_db.dim_city c on t.city_id=c.city_id
group by city_id,months)
select a.city_name,a.months,a.actual_trip,m.total_target_trips,
case when a.actual_trip>m.total_target_trips then "Above Target" else "Below Target"
end as performance_status,
round(((a.actual_trip-m.total_target_trips)/m.total_target_trips) *100,2) AS percentage_difference
 from actual a
join targets_db.monthly_target_trips m
on a.city_id=m.city_id and a.months=monthname(m.month)
```

city_name	months	actual_trip	total_target_trips	performance_status	percentage_difference
Visakhapatnam	January	4468	4500	Below Target	-0.71
Chandigarh	January	6810	7000	Below Target	-2.71
Surat	January	8358	9000	Below Target	-7.13
Vadodara	January	4775	6000	Below Target	-20.42
Mysore	January	2485	2000	Above Target	24.25
Kochi	January	7344	7500	Below Target	-2.08
Indore	January	6737	7000	Below Target	-3.76
Jaipur	January	14976	13000	Above Target	15.20
Coimbatore	January	3651	3500	Above Target	4.31
Lucknow	January	10858	13000	Below Target	-16.48
Visakhapatnam	February	4793	4500	Above Target	6.51
Chandigarh	February	7387	7000	Above Target	5.53
Surat	February	9069	9000	Above Target	0.77
Vadodara	February	5228	6000	Below Target	-12.87
Mysore	February	2668	2000	Above Target	33.40
Kochi	February	7688	7500	Above Target	2.51
Indore	February	7210	7000	Above Target	3.00
Jaipur	February	15872	13000	Above Target	22.09

sult 1

Business Request - 3: City-Level Repeat Passenger Trip Frequency Report

Generate a report that shows the percentage distribution of repeat passengers by the number of trips they have taken in each city. Calculate the percentage of repeat passengers who took 2 trips, 3 trips, and so on, up to 10 trips.

Each column should represent a trip count category, displaying the percentage of repeat passengers who fall into that category out of the total repeat passengers for that city.

```
SELECT c.city_name,
round(sum(case when trip_count="2-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 2_trips,
round(sum(case when trip_count="3-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 3_trips,
round(sum(case when trip_count="4-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 4_trips,
round(sum(case when trip_count="5-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 5_trips,
round(sum(case when trip_count="6-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 6_trips,
round(sum(case when trip_count="7-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 7_trips,
round(sum(case when trip_count="8-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 8_trips,
round(sum(case when trip_count="9-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 9_trips,
round(sum(case when trip_count="10-Trips" then repeat_passenger_count end)/sum(repeat_passenger_count),2) as 10_trips,
sum(repeat_passenger_count) as total_repeat_passenger
 FROM trips_db.dim_repeat_trip_distribution r
join trips_db.dim_city c on r.city_id=c.city_id
group by c.city_name
```

city_name	2_trips	3_trips	4_trips	5_trips	6_trips	7_trips	8_trips	9_trips	10_trips	total_repeat_passenger
Visakhapatnam	0.51	0.25	0.10	0.05	0.03	0.02	0.01	0.01	0.01	5108
Chandigarh	0.32	0.19	0.16	0.12	0.07	0.05	0.03	0.02	0.02	5070
Surat	0.10	0.14	0.17	0.20	0.18	0.12	0.06	0.02	0.01	8638
Vadodara	0.10	0.14	0.17	0.18	0.19	0.13	0.06	0.02	0.02	4346
Mysore	0.49	0.24	0.13	0.06	0.04	0.02	0.01	0.01	0.00	1477
Kochi	0.48	0.24	0.12	0.06	0.04	0.02	0.02	0.01	0.01	7626
Indore	0.34	0.23	0.13	0.10	0.07	0.05	0.03	0.02	0.02	7216
Jaipur	0.50	0.21	0.12	0.06	0.04	0.03	0.02	0.01	0.01	9682
Coimbatore	0.11	0.15	0.16	0.21	0.18	0.10	0.06	0.02	0.01	2551
Lucknow	0.10	0.15	0.16	0.18	0.20	0.11	0.06	0.02	0.01	9597

Business Request - 4: Identify Cities with Highest and Lowest Total New Passengers

Generate a report that calculates the total new passengers for each city and ranks them based on this value. Identify the top 3 cities with the highest number of new passengers as well as the bottom 3 cities with the lowest number of new passengers, categorising them as "Top 3" or "Bottom 3" accordingly.

```
(SELECT c.city_name,sum(new_passengers) as new_passenger,
(case when new_passengers>0 then "Top3" else 0 end) as city_category
 FROM trips_db.fact_passenger_summary p
join trips_db.dim_city c  on c.city_id=p.city_id
group by c.city_name,city_category
order by new_passenger desc
limit 3)
union All
(SELECT c.city_name,sum(new_passengers) as new_passenger,
(case when new_passengers>0 then "Bottom 3" else 0 end) as city_category
 FROM trips_db.fact_passenger_summary p
join trips_db.dim_city c  on c.city_id=p.city_id
group by c.city_name,city_category
order by new_passenger asc
limit 3)
```

Result Grid | Filter Rows: | Exp

city_name	new_passenger	city_category
Jaipur	45856	Top3
Kochi	26416	Top3
Chandigarh	18908	Top3
Coimbatore	8514	Bottom 3
Vadodara	10127	Bottom 3
Surat	11626	Bottom 3

Business Request - 5: Identify Month with Highest Revenue for Each City

Generate a report that identifies the month with the highest revenue for each city. For each city, display the month_name, the revenue amount for that month, and the percentage contribution of that month's revenue to the city's total revenue.

```
with rev as (SELECT city_name,month_name,
sum(fare_amount) as revenue FROM trips_db.fact_trips f
join trips_db.dim_city c on c.city_id=f.city_id
join trips_db.dim_date d on d.date=f.date
group by city_name,month_name),

city_rev as (select city_name,month_name,revenue,
rank() over(partition by city_name order by revenue desc) as rnk,
sum(revenue) over(partition by city_name) as total_city_revenue from rev)

select city_name,month_name,revenue,
round((revenue/total_city_revenue*100),2) as percentage_contribution
 from city_rev
where rnk=1
```

city_name	month_name	revenue	percentage_contribution
Chandigarh	February	2108290	19.07
Coimbatore	April	612431	17.38
Indore	May	1380996	18.09
Jaipur	February	7747202	20.82
Kochi	May	3333746	19.61
Lucknow	February	1777269	18.78
Mysore	May	745170	18.38
Surat	April	1154909	17.96
Vadodara	April	706250	18.60
Visakhapatnam	April	1390682	17.34

Business Request - 6: Repeat Passenger Rate Analysis

Generate a report that calculates two metrics:

1. Monthly Repeat Passenger Rate: Calculate the repeat passenger rate for each city and month by comparing the number of repeat passengers to the total passengers.
2. City-wide Repeat Passenger Rate: Calculate the overall repeat passenger rate for each city, considering all passengers across months.

```
with t1 as (SELECT city_name,month_name,sum(total_passengers) as  total_passenger,
sum(repeat_passengers) as repeat_passenger,
round(sum(repeat_passengers)/sum(total_passengers)*100,2) as monthly_repeat_passenger_rate_percent
FROM trips_db.fact_passenger_summary p
join trips_db.dim_city c on c.city_id=p.city_id
join trips_db.dim_date d on d.date=p.month
group by city_name,month_name)
select *,
round(repeat_passenger/sum(repeat_passenger) over(partition by city_name) *100,2) as
city_repeat_passenger_rate_percent from t1
```

city_name	month_name	total_passenger	repeat_passenger	monthly_repeat_passenger_rate_percent	city_repeat_passenger_rate_percent
Chandigarh	February	4957	853	17.21	16.82
Chandigarh	January	4640	720	15.52	14.20
Chandigarh	March	4100	872	21.27	17.20
Chandigarh	April	3285	789	24.02	15.56
Chandigarh	May	3699	969	26.20	19.11
Chandigarh	June	3297	867	26.30	17.10
Coimbatore	June	1628	402	24.69	15.76
Coimbatore	April	1722	480	27.87	18.82
Coimbatore	March	1965	427	21.73	16.74
Coimbatore	February	1993	346	17.36	13.56
Coimbatore	January	2214	392	17.71	15.37
Coimbatore	May	1543	504	32.66	19.76
Indore	June	3152	1131	35.88	15.67
Indore	May	3591	1563	43.53	21.66
Indore	April	3646	1295	35.52	17.95