

group 3



FLIGHT TICKET PRICES ACROSS INDIA



DATA ANALYSIS PROJECT



TEAM MEMBERS



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introduction

air travel is an essential mode of transportation Worldwide, and the prices of flight tickets can vary widely based on various factors. Through this analysis, We aimed to uncover patterns and trends in flight ticket prices across India and identify factors that affect ticket prices.



ABOUT THE DATASET

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300153

Rows

11

Columns

69%

Economy Flights

31%

Business Flights

0

Missing Values

0

Invalid Values

88%

Non-Direct Flights

12%

Direct Flights

	airline	flight	source_city	departure_time	stops	arrival_time	destination_city	class	duration	days_left	price	trip
0	SpiceJet	SG-8709	Delhi	Evening	zero	Night	Mumbai	Economy	2.17	1	5953	Delhi-Mumbai
1	SpiceJet	SG-8157	Delhi	Early_Morning	zero	Morning	Mumbai	Economy	2.33	1	5953	Delhi-Mumbai
2	AirAsia	I5-764	Delhi	Early_Morning	zero	Early_Morning	Mumbai	Economy	2.17	1	5956	Delhi-Mumbai
3	Vistara	UK-995	Delhi	Morning	zero	Afternoon	Mumbai	Economy	2.25	1	5955	Delhi-Mumbai
4	Vistara	UK-963	Delhi	Morning	zero	Morning	Mumbai	Economy	2.33	1	5955	Delhi-Mumbai

- days_left column refers to how many days the ticket was booked before departure.
- duration column refers to number of hours spent during flight including transit time.
- price is given by Indian rupee.

Graphical representation about the dataset



Economy

	duration	days_left	price
count	206666.000000	206666.000000	206666.000000
mean	11.550060	26.123673	6572.342383
std	7.241284	13.529610	3743.519517
min	0.830000	1.000000	1105.000000
25%	6.250000	15.000000	4173.000000
50%	10.170000	26.000000	5772.000000
75%	15.250000	38.000000	7746.000000
max	49.830000	49.000000	42349.000000

Business

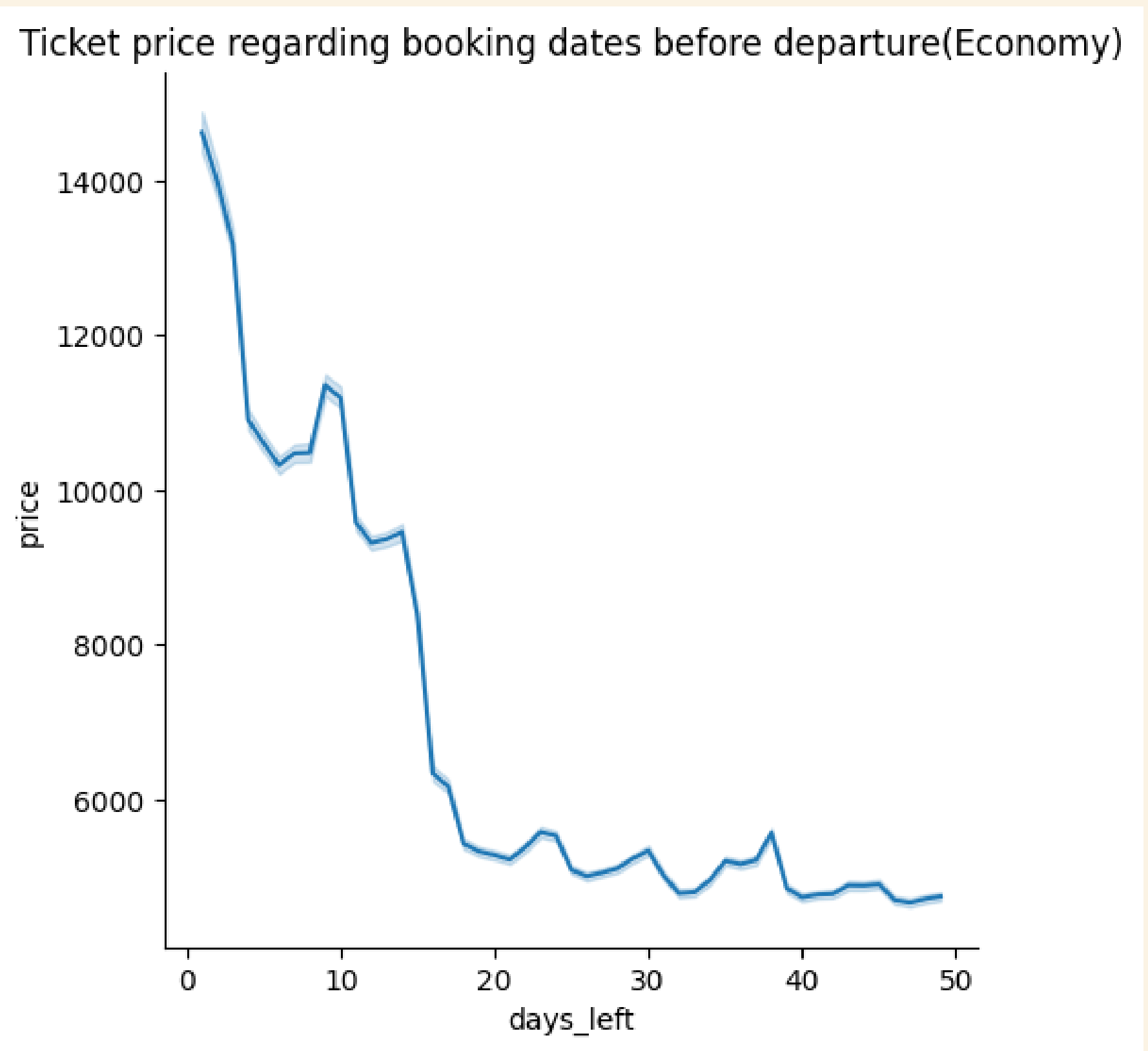
	duration	days_left	price
count	93487.000000	93487.000000	93487.000000
mean	13.704274	25.741857	52540.081124
std	6.852555	13.626538	12969.314606
min	1.000000	1.000000	12000.000000
25%	8.830000	14.000000	45185.000000
50%	13.080000	26.000000	53164.000000
75%	17.830000	38.000000	60396.000000
max	47.750000	49.000000	123071.000000



**DO YOU THINK IT IS CHEAPER OR MORE
EXPENSIVE TO BUY THE TICKET 1 OR 2
DAYS BEFORE THE FLIGHT?**

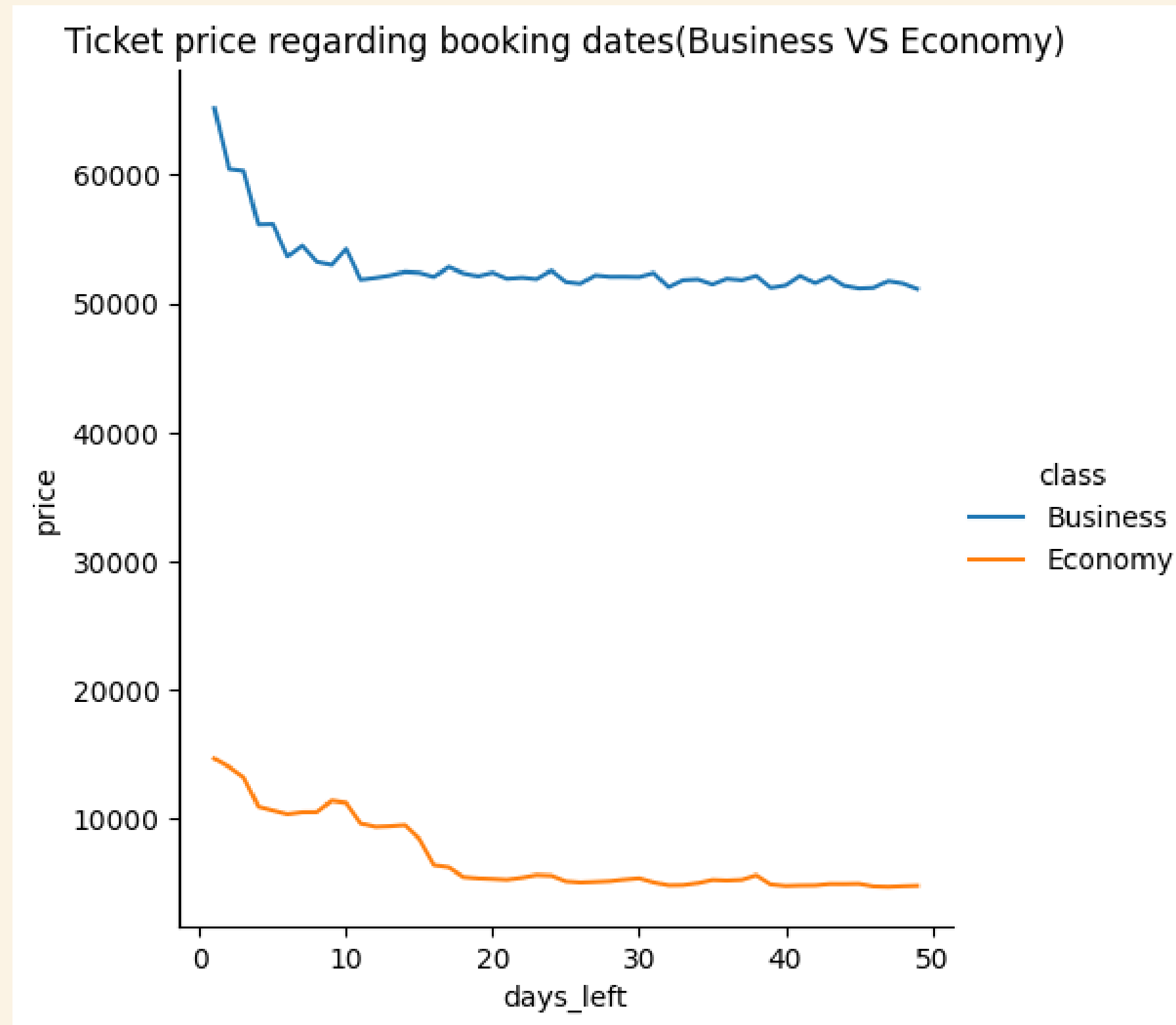


**For economy flights
the prices are about
208% higher if you
book the ticket 1 or 2
days before
departure!**



**for business flights
the prices are about
27.5% higher if you
book the ticket 1 or 2
days before
departure!**



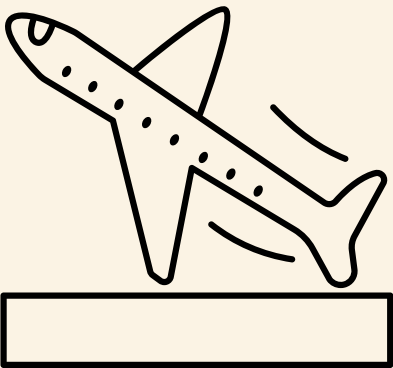
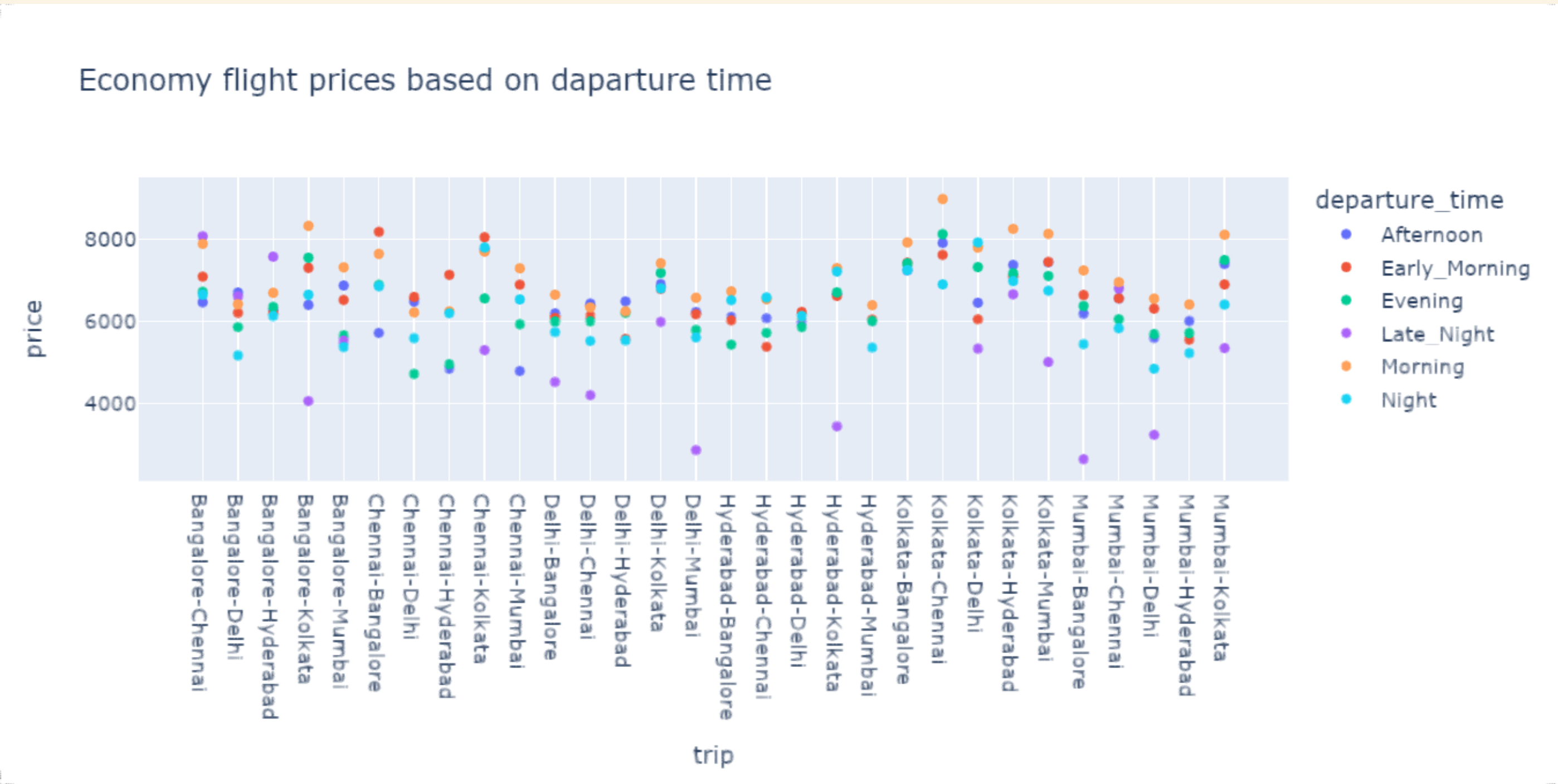


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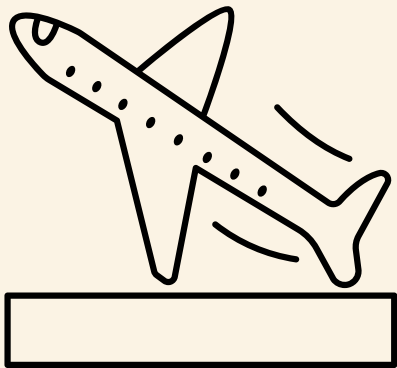
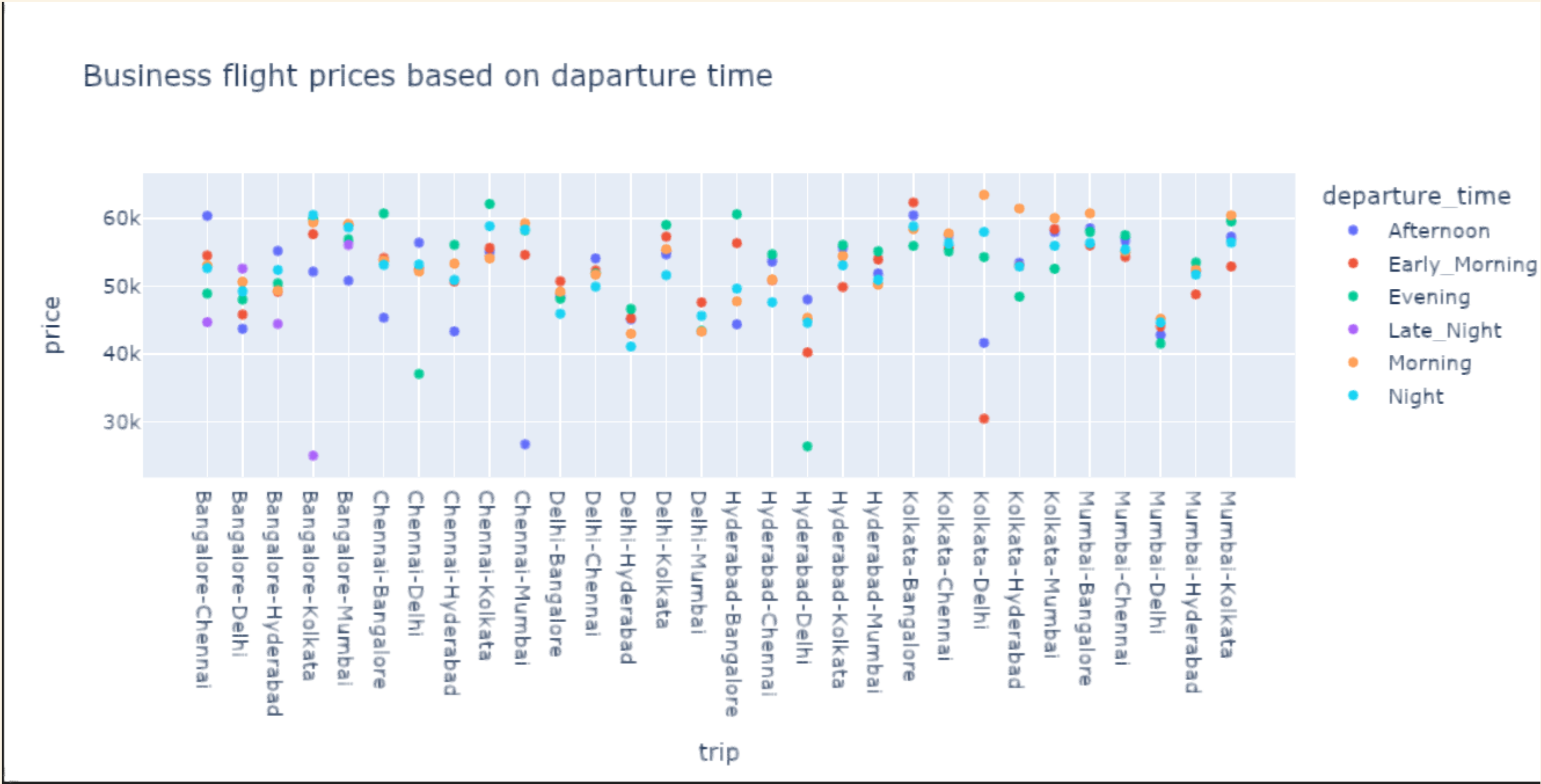
Which time during the day do you think it is cheaper to take off?



flights departing at late night are always the cheapest, in contrast, the most expensive flights are those which departing at morning!



there is no trend in the prices related to departure time, but late night flights are not a common thing!

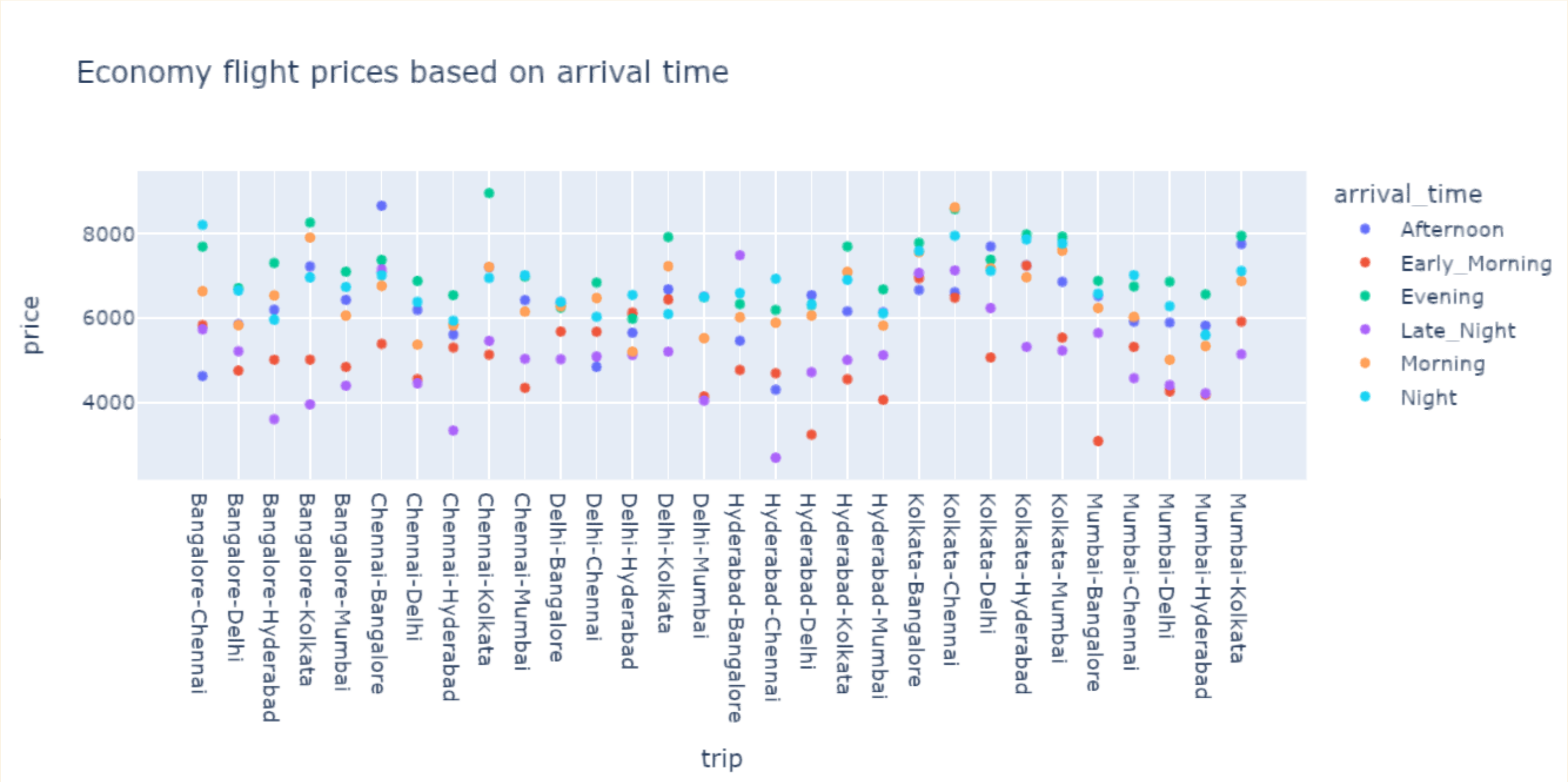
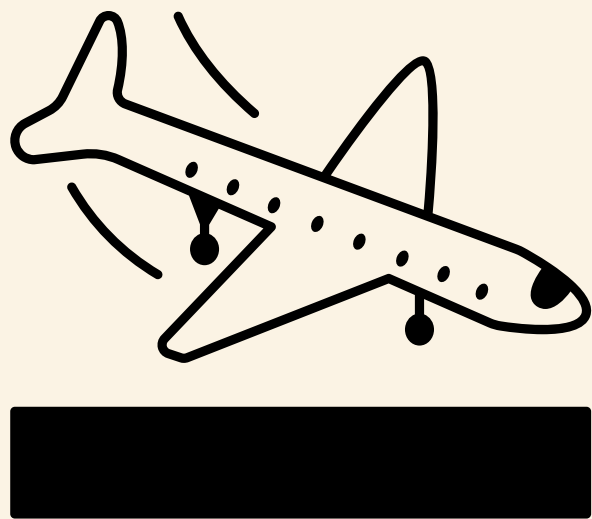


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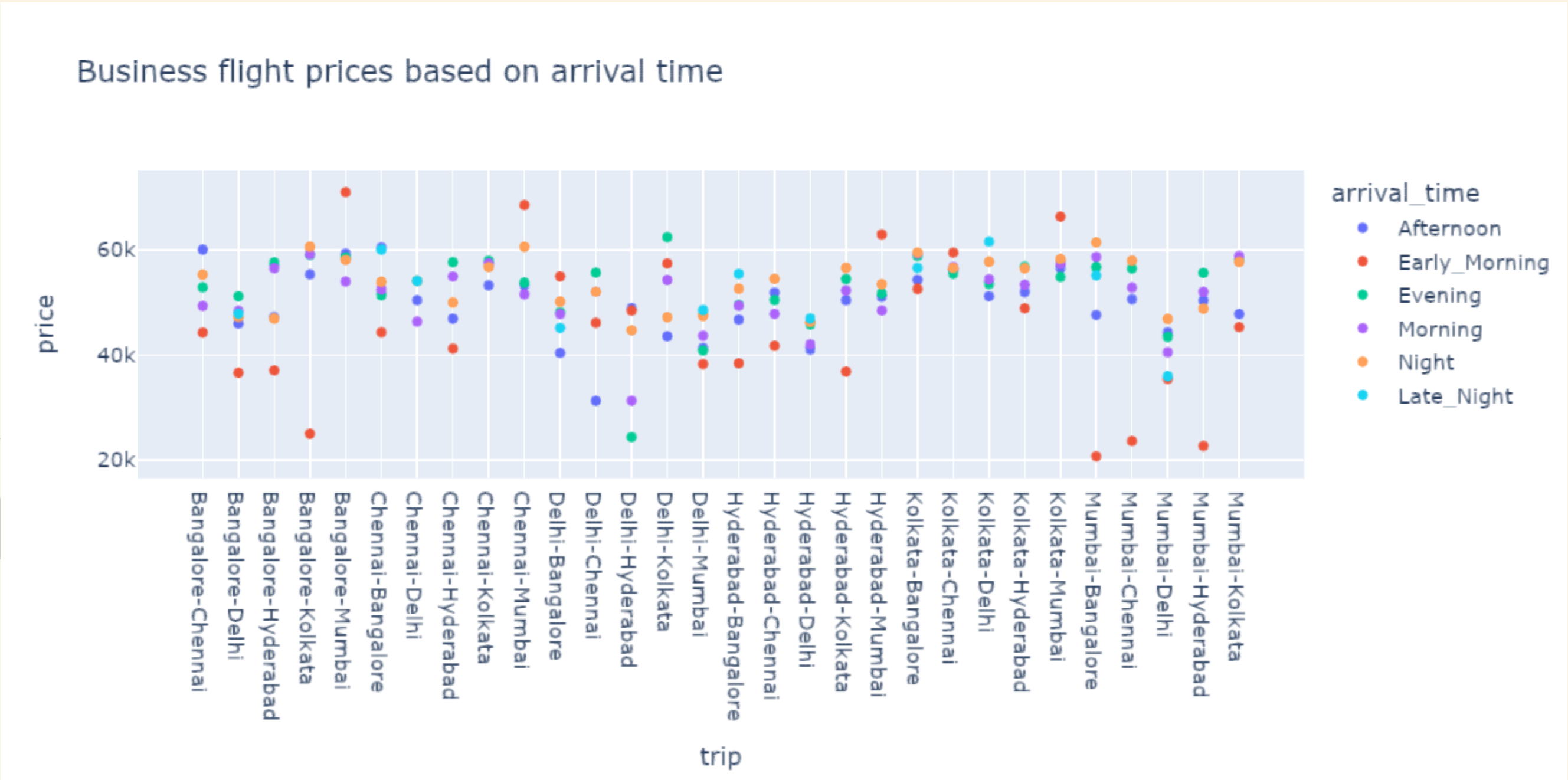
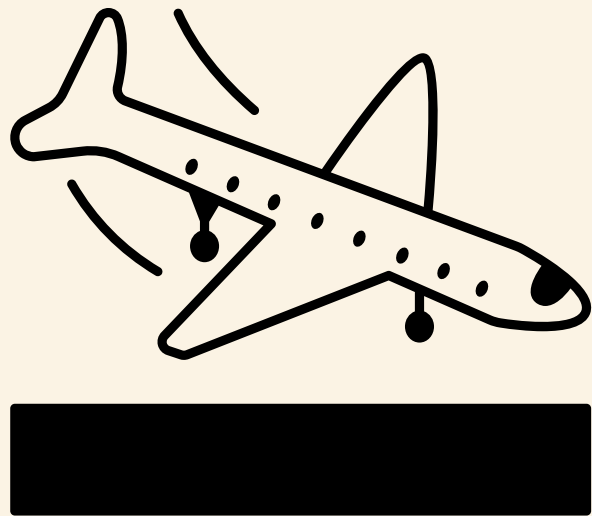
Which time during the day do you think it is cheaper according to arrival time?



flights landing at late night are always are the cheapest, in contrast, the most expensive flights are those which lands at evening!



flights landing at early morning usually are the cheapest, in contrast, the most expensive flights are those which lands at night!



4

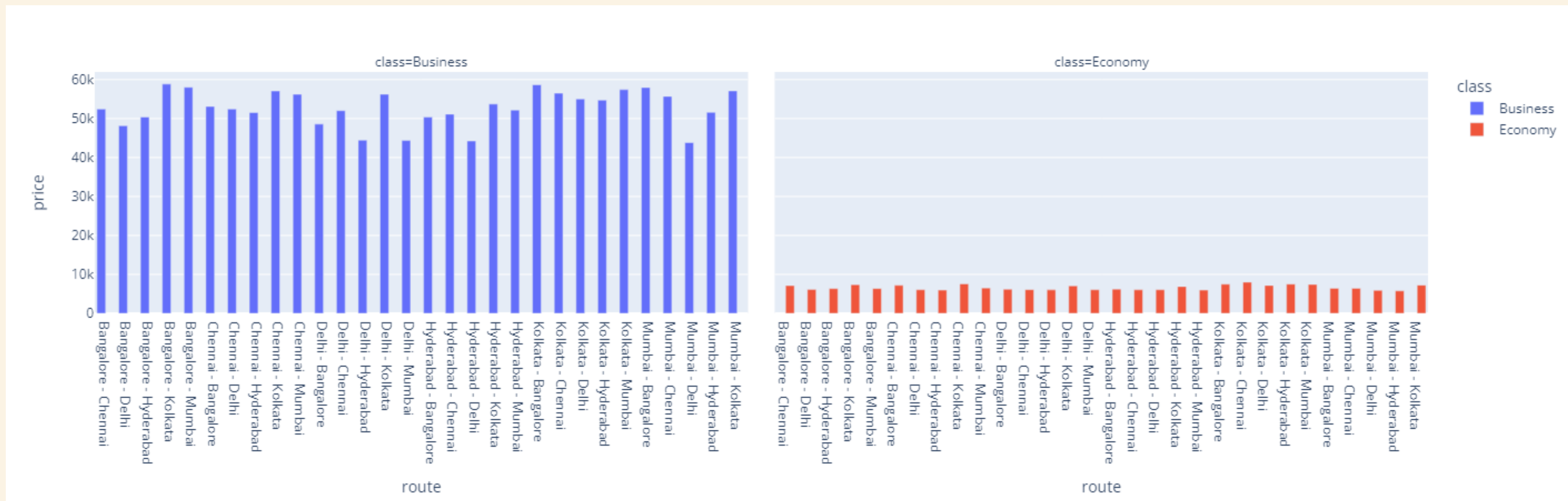
How does the ticket price vary between Economy and Business class?



Economy class price range: 41244.00
Business class price range: 111071.00
Economy class price variation: 627.54%
Business class price variation: 211.40%



the Business prices varies more between routes, while the economy prices are more stable.

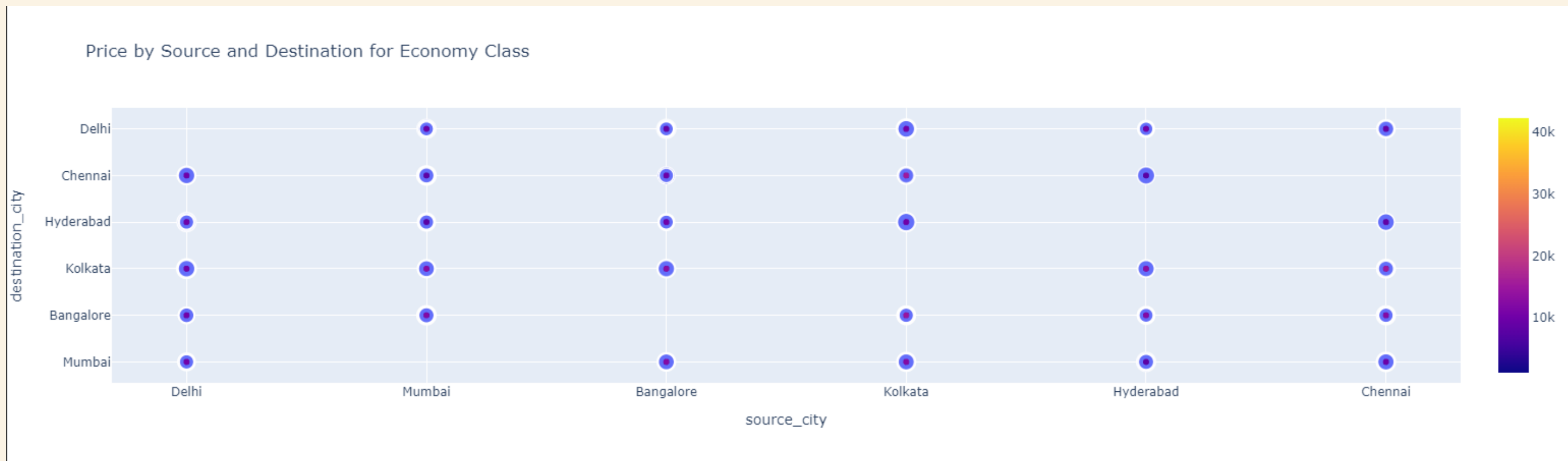


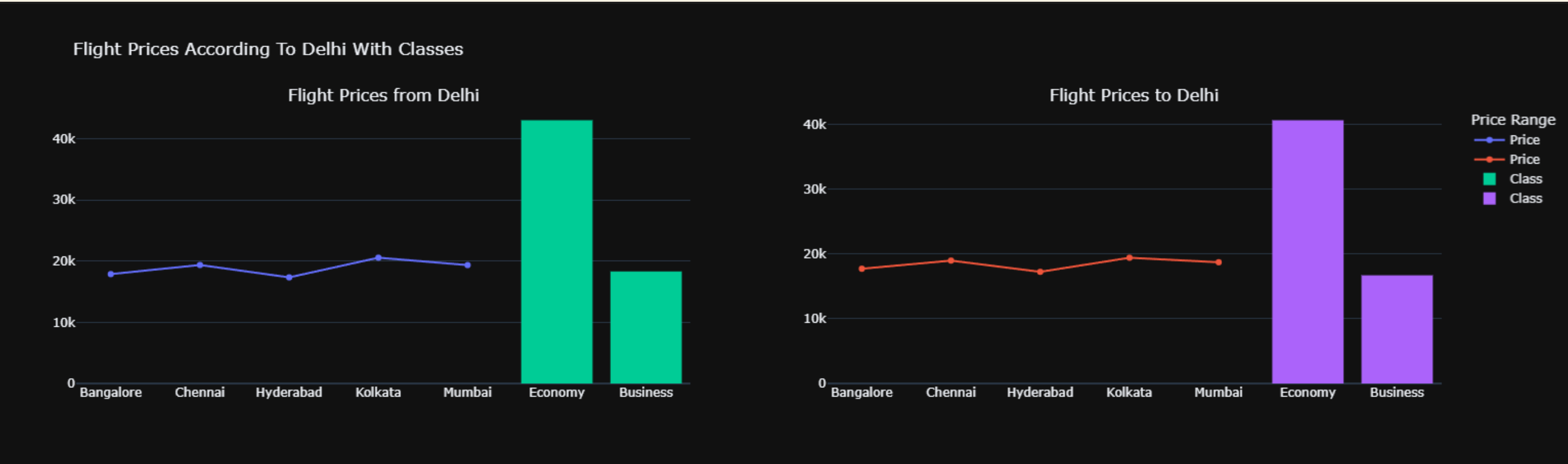
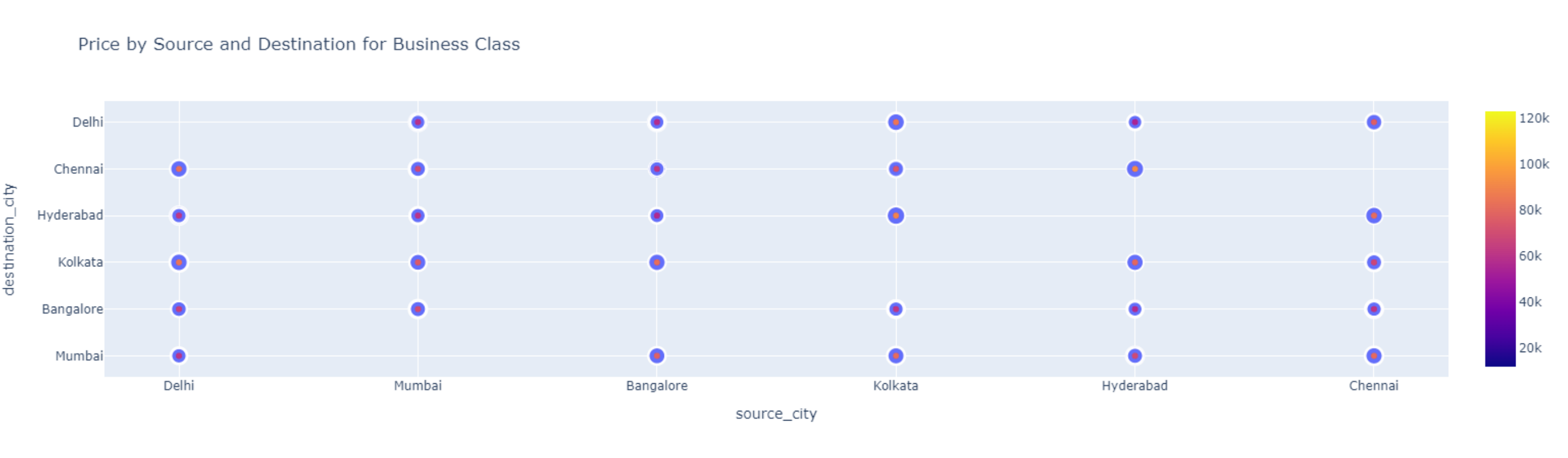
5

How the price changes with change in Source and Destination?



According to the research we conducted based on each location, we saw that the number of economy flights is in all probability almost twice as much as business flights. In addition, we saw that the highest price in economy flights reached up to 40 thousand rupees, and this amount was around 120 thousand in business.



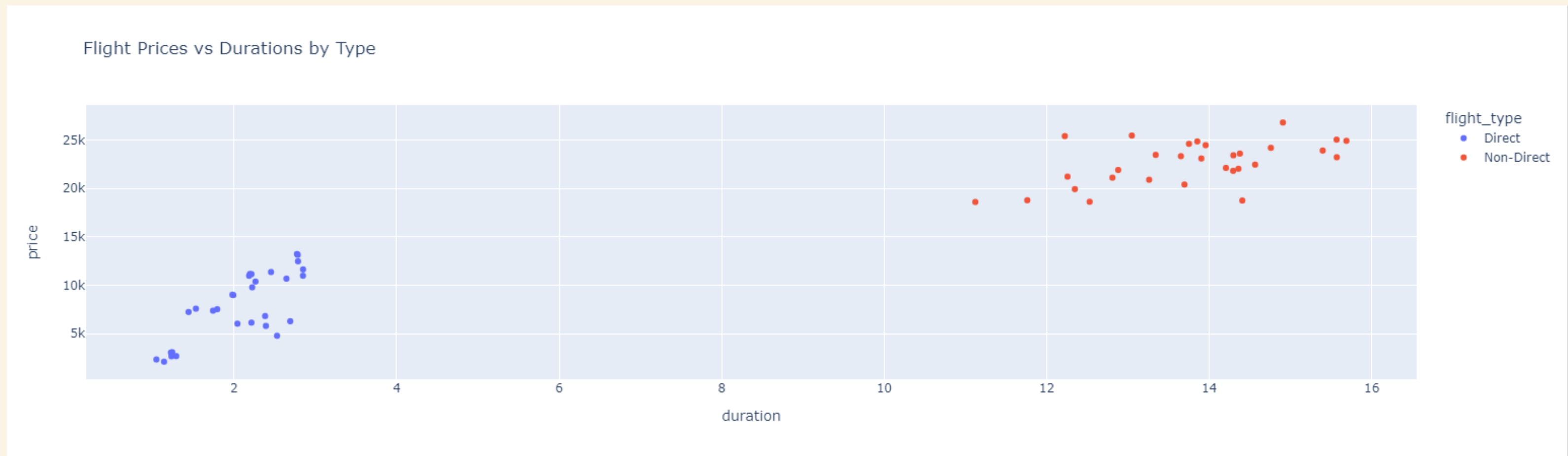


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What are the levels of demand by passengers on direct and non-stop flights?



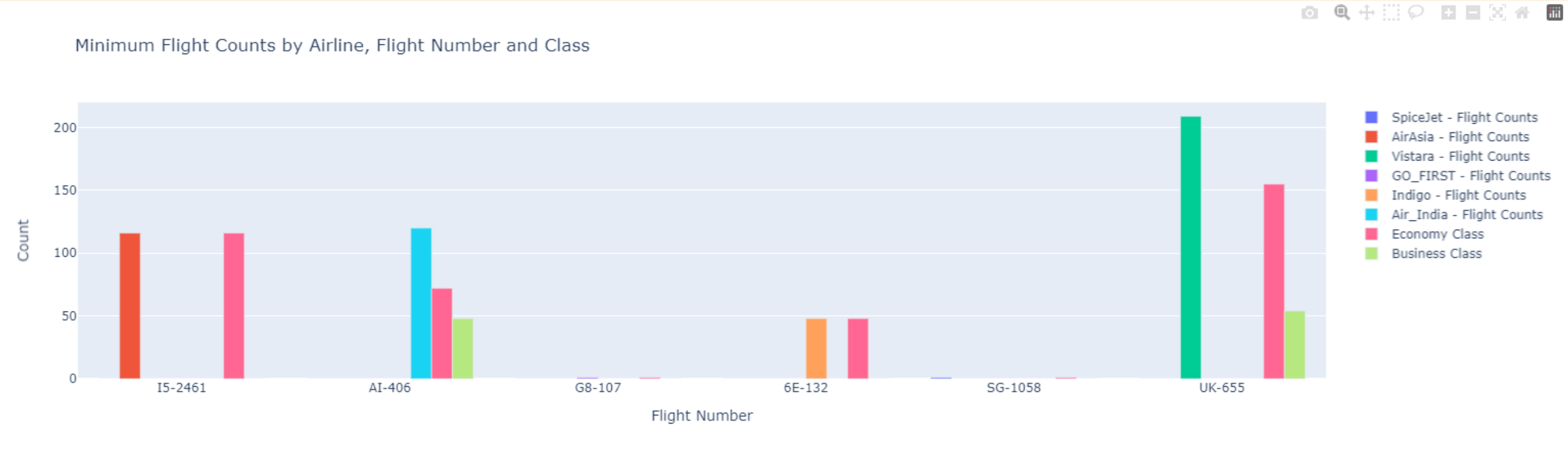
Interestingly, as can be seen from the graph, although the prices of direct flights are cheaper, the majority of people chose connecting flights.

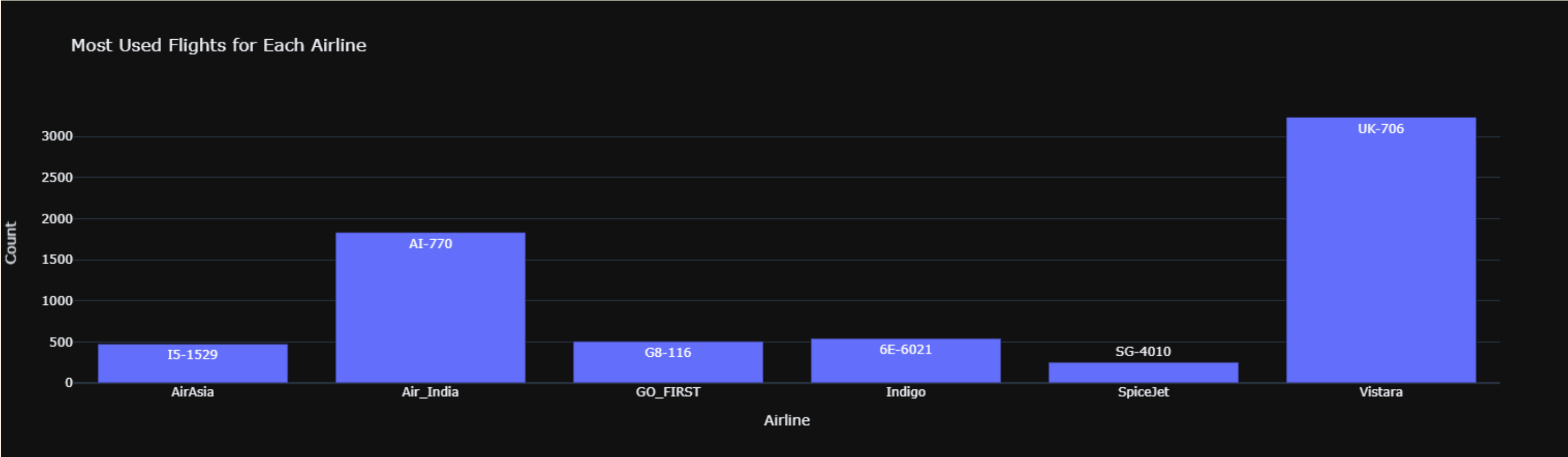




What is most and less used flights in the whole flights for each airliners and what is the most and less used flights according to destinations and classes?







Thanks for
YOUR TIME