✈️ Flight Ticket Pricing Analysis Report

# 1. Price Comparison by Class

Analysis shows that Business class tickets are significantly more expensive than Economy tickets across all airlines. The price gap is consistent and reflects the premium services attached to Business class. On average, Business class prices are multiple times higher, confirming the stratification of airline pricing strategies.

# 2. Impact of Days Left on Average Ticket Prices by Airlines

Ticket prices are strongly influenced by the number of days left before departure. Airlines generally show a sharp increase in prices as departure day approaches. Some airlines (e.g., low-cost carriers) maintain relatively stable prices until the last few days, while full-service airlines increase prices steadily. This supports the notion that early booking secures cheaper fares, although the effect varies by airline.

# 3. Average Ticket Price by Airline

Comparison across airlines reveals clear pricing tiers: Premium airlines like Vistara and Air India generally command higher prices, while budget airlines such as AirAsia and SpiceJet maintain lower average fares. This reflects the airlines’ market positioning, with low-cost carriers targeting price-sensitive travelers while premium carriers emphasize comfort and service.

# 4. Average Ticket Price by Number of Stops

Flights with zero stops (non-stop) are generally more expensive than those with one or more stops. Non-stop flights save time, hence airlines price them at a premium. Multi-stop flights, while cheaper, increase travel time and inconvenience. This highlights the classic time vs. money tradeoff in air travel.

# 5. Ticket Price Distribution by Departure Time

Prices also vary depending on time of departure: Early morning and late-night flights tend to be cheaper, while morning and evening (peak hours) flights are often more expensive due to higher demand. This aligns with passenger preferences for convenient departure times.

# 6. Number of Flights per Airline

Analysis of flight counts shows that certain airlines, particularly IndiGo and SpiceJet, operate more flights than their competitors. This high frequency suggests broader market coverage and stronger competition in key routes. Smaller airlines contribute fewer flights, focusing on niche or regional markets.

# 7. Cheapest Airline per Route

For each city-to-city route, there is usually a standout airline offering the lowest average price. Budget airlines dominate most routes in terms of affordability. This indicates strong price competition, particularly on popular routes where multiple airlines operate.

# 8. Top 10 Most Popular Routes

The dataset highlights the busiest city pairs, with Delhi–Mumbai, Bangalore–Delhi, and Mumbai–Bangalore appearing among the top. These routes represent major business and travel corridors in India, justifying high flight frequencies by multiple airlines.

# 9. Top 10 Cheapest Routes (Average Prices)

Analysis of average fares shows certain routes are consistently cheaper: Short-haul flights, especially between geographically closer cities, dominate the cheapest list. Budget carriers often keep prices low to remain competitive on these routes. For passengers, these routes provide opportunities for affordable travel without significant price fluctuations.

# 📌 Conclusion

This analysis of the flight pricing dataset reveals several consistent patterns:  
- Class, stops, and timing play key roles in determining ticket prices.  
- Booking early generally results in lower fares, though the effect differs by airline.  
- Airline type (budget vs premium) strongly impacts price levels.  
- Popular routes see intense competition, while niche routes are dominated by fewer carriers.  
  
Overall, the dataset confirms that pricing in air travel is influenced by a combination of market demand, airline strategy, and passenger preferences. These insights are useful for both travelers (to plan cheaper trips) and airlines (to refine pricing strategies).