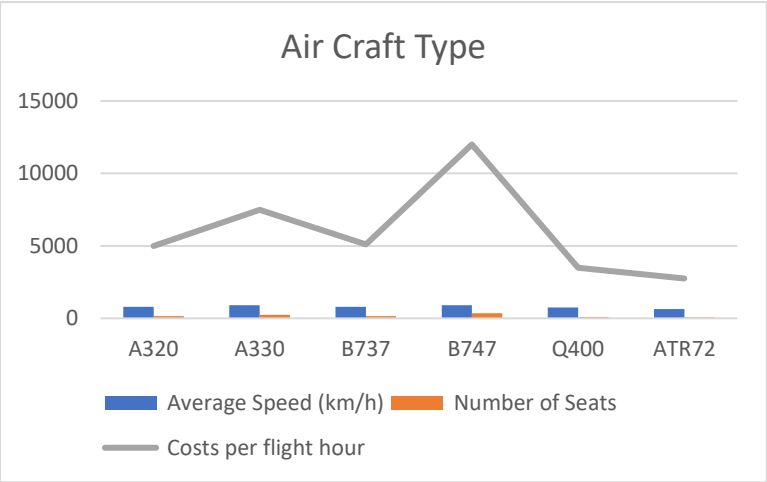
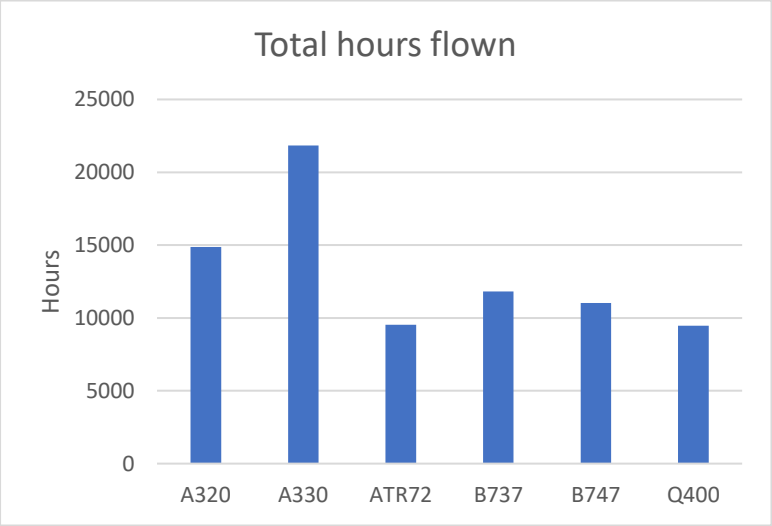


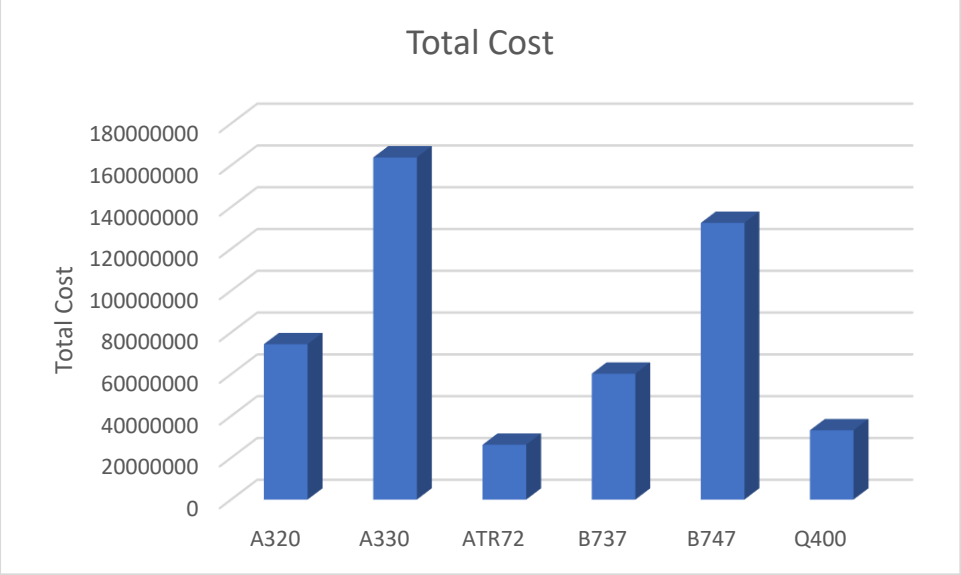
Cost per flight hour is highest for B747. In order to calculate the total incurred we need to multiply it with total hours flown in a given time period.



Total hours flown in the year 2014 by each type.

Total cost is given by (Hours flown x Costs/hour)

The total cost by aircraft type for the year of company A



- A330 is the most flown aircraft and also company A has spent highest amount in this type of air craft

Now we have total cost, in order to find lowest cost per seat per km flown we have to find number of km flown

Number of km flown is (Avg. Speed (km/h) x number of hours flown)

Cost per seat per km = cost x (1.0/number of seats) x (1.0/number of km)

*The aircraft type **with lowest cost per seat per km** is**: A330** with a cost per seat per km of**: 0.0333333333333***.

- From above two A330 is the most flown (in hours) and also has the lowest cost per seat per Km. It's really good as we have spent less amount per seat per km.

Company B is a start-up. Considering Range, Passenger demand, costs we need to suggest its fleet.

From above company A data, we aircraft types and cost. For each city pair, eligible air craft types (whose range is greater than the distance between city pairs) will have their cost ((Distance/Speed) x Cost per hour). From these we use the lowest.

For the city pair: AA, DD the most suitable aircraft type is:

A320 with a total cost incurred: 12500.0

For the city pair: BB, CC the most suitable aircraft type is:

A330 with a total cost incurred: 108333.333333

For the city pair: AA, BB the most suitable aircraft type is:

A330 with a total cost incurred: 50000.0

For the city pair: CC, AA the most suitable aircraft type is:

A320 with a total cost incurred: 5000.0

For company B, the best suited aircrafts are A330, A320