Ex6.17 - Fundamentals of Database Systems

a, departure = flight_number ξ min(leg_number)(flight_leg)
arrival = flight_number ξ max(leg_number)(flight_leg)
result = π flight_number, departure_airport_code, arrival_airport_code ((departure * airport) * (arrival * airport))

b, dep_hous = σ departure_airport_code = 'IAH' (flight_leg)
arr_la = σ arrival_airport_code = 'LAX' (flight_leg)
houstola = dep_hous * arr_la
result = π flight_number, weekdays (houstola * flight)

c, dep_hous = σ departure_airport_code in (σ city = 'houston' (airport))(flight_leg)
arr_la = σ arrival_airport_code in (σ city = 'los angeles' (airport))(flight_leg)
houstola = dep_hous * arr_la
result = π flight_number, departure_airport_code, scheduled_departure_time, arrival_airport_code, scheduled_arrival_time, weekdays (houstola * flight)

d, result = σ flight_number = 'CO197' (fare)

e, inform = σ flight_number = 'CO197' and date = '2009-10-09' (leg_instance)
result = π number_of_available_seats (inform)