3.2

a) Relações:

Airport, Airplane, AirplaneType, LegInstance, Seat, Fare, Flight, FlightLeg.

Esquemas:

Airport(id, city, state, name);

Airplane(airplane\_id, airplane\_type, total\_no\_of\_seats);

AirplaneType (type\_name, company, max\_seats);

FlightLeg(leg\_no, flight\_num, departure\_airport\_code, departure\_scheduled\_time, arrival\_airport\_code, arrival\_scheduled\_time);

LegInstance (leg\_num, flight\_num, date, num\_of\_avail\_seats, airplane\_id, departure\_airport\_code, departure\_time ,arrival\_airport\_code, arrival\_time);

Seat (seat\_no, leg\_date, leg\_num, flight\_num);

Fare (code, flight\_num, restrictions, amount);

Flight (flight\_num, airline, weekdays);

CanLand(airport\_code, airplane\_id);

b)

Airport(id, city, state, name);

Airport: chaves candidatas = { id, City, Name};

chave primária={ id };

chaves estrangeiras={};

Airplane(airplane\_id, airplane\_type, total\_no\_of\_seats);

Airplane: chaves candidatas={ airplane\_id };

chave primária={ airplane\_id };

chaves estrangeiras={ airplane\_type };~

AirplaneType (type\_name, company, max\_seats);

AirplaneType: chaves candidatas={ Type\_name };

chave primária={ Type\_name };

chaves estrangeiras={}:

FlightLeg(leg\_no, flight\_num, departure\_airport\_code, departure\_scheduled\_time ,arrival\_airport\_code, arrival\_scheduled\_time);

FlightLeg: chaves candidatas={ { leg\_no, flight\_num } };

chave primária={ leg\_no, flight\_num };

chaves estrangeiras={ flight\_num, departure\_airport\_code, arrival\_airport\_code }:

LegInstance (leg\_num, flight\_num, date, num\_of\_avail\_seats, airplane\_id, departure\_airport\_code, departure\_time, arrival\_airport\_code, arrival\_time);

LegInstance: chaves candidatas={ { leg\_num, date, flight\_num } };

chave primária={ leg\_num, date, flight\_num };

chaves estrangeiras={ leg\_num, flight\_num, arrival\_airport\_code, departure\_airport\_code };

Seat (seat\_no, leg\_date, leg\_num, flight\_num);

Seat: chaves candidatas={ { seat\_num, leg\_num, flight\_num, leg\_date } };

chave primária={ seat\_num, leg\_date, leg\_num, flight\_num };

chaves estrangeiras={ leg\_date, leg\_num, flight\_num };

Fare (code, flight\_num, restrictions, amount);

Fare: chaves candidatas={ { code, flight\_num } };

chave primária={ code, flight\_num };

chaves estrangeiras={ flight\_num }

Flight (flight\_num, airline, weekdays);

Flight: chaves candidatas={ { flight\_num } };

chave primária={ flight\_num };

chaves estrangeiras={ }

CanLand(airport\_code, airplane\_id);

CanLand: chaves candidatas={ { airport\_code, airplane\_id } };

chave primária={ airport\_code, airplane\_id };

chaves estrangeiras={ airport\_code, airplane\_id }