Consider the following schema for an airline database (primary key attributes are in **bold**):

```
FLIGHTS     (flight num, source_city, destination_city)
DEPARTURES  (flight num, date, plane_type)
PASSENGERS  (passenger id, passenger_name, passenger_address)
BOOKINGS    (passenger id, flight num, date, seat_number)
```

Express the following queries in SQL (feel free to abbreviate relation and attribute names and to use INTERSECT and EXCEPT if you need to):

a) Find the passenger_id of all passengers who have a seat booked on a plane of type "747" from San Francisco to Washington. **Do not return any duplicate values.**

b) Find the cities that have direct (non-stop) flights to both Honolulu and Newark

c) Find the flight_num and date of all flights for which there are no reservations.

d) Find the passenger_name of all passengers who have a seat booked on at least one plane of **every** type.

e) Print an ordered list of all source cities and the number of distinct destinationcities that they have direct (non-stop) flights to. The list should be ordered in decreasing number of destinations and should contain **only those source cities that have flights to 25 or more distinct destinations**.

For example, the output should look like:

Source_City	NumDestinations
Chicago	120
Atlanta	106
...	...
Austin	25