5DV021, Obligatory Exercise 2 answer sheet, query 1

Query: Find the code of each airport which is located either in Germany or else in Spain.

Solution in the relational algebra:

Solution in the relational tuple calculus:

5DV021, Obligatory Exercise 2 answer sheet, query 2

Query: Find the name and code of each airline which has both flights which depart from the airport with code 'CDG' and flights which depart from the airport with code 'ORY'.

Solution in the relational algebra:

Solution in the relational tuple calculus:

Query: Find the name and code of those airlines which do not have any flights to a city in France.

Solution in the relational algebra:

Solution in the relational tuple calculus:

5DV021, Obligatory Exercise 2 answer sheet, query 4

Query: Find the codes of those airports which have flights to every airport in France. (Note that no French airport will normally qualify because, for example, there is no flight from 'CDG' to 'CDG'.)

Solution in the relational algebra:

Solution in the relational tuple calculus:

5DV021, Obligatory Exercise 2 answer sheet, query 5

Query: Find the codes of those airports which have departures for exactly two distinct airlines.

Solution in the relational algebra:

Solution in the relational tuple calculus: