Appendix A: The IMDb Database

	Attribute	Type
people	id[2]	int
	name	varchar(128)
	birth_year	int
	death_year	int

	Attribute	Type
movies	id[3]	int
	title	varchar(512)
	runtime	int
	release_year	int
	rating	numeric(3,1)
	num_ratings	int

	Attribute	Type
known_for	movie_id	int
	person_id	int

	Attribute	Type
cast_in	movie_id	int
	person_id	int
	character	varchar(512)

	Attribute	Type
crew_in	movie_id	int
	person_id	int
	job	varchar(19)

	Attribute	Type
movie_genres	movie_id	int
	genre	varchar(11)

* Filled colors in the 'Attribute' columns indicate references between relations
* The attributes in the (primary) key are underlined
* Relation and column names are case-insensitive in PostgreSQL

Notes:

- In this database, **"crew_in"** refers to staff members (e.g. directors, electricians, music editors) whereas **"cast_in"** refers to actors and actresses in a movie.
- The relations **"crew_in"** and **"cast_in"** describe the participation between a staff and a movie, or between an actor/actress and a movie, respectively.
- Recall the definition of primary key. In the relation **"movies"**, the same movie name can correspond to multiple release years. We always identify 'a movie' by its id, instead of the movie name, as suggested by the primary key constraint.
- All attributes are non-null with two exceptions: people.death_year (assume that a null death year means the person is still alive) and movies.rating (which is null if and only if movies.num_ratings=0)

[2] **cast_in**(person_id) and **crew_in**(person_id) are foreign keys referencing **people**(id)
[3] **cast_in**(movie_id), **crew_in**(movie_id), and **movie_genres**(movie_id) are foreign keys referencing **movie**(id)

Appendix B: The OpenFlights Database

	Attribute	Type
airlines	id	int
	name	varchar(255)
	alias	varchar(255)
	iata	char(2)
	icao	char(3)
	callsign	varchar(255)
	country	varchar(255)
	active	char(1)

	Attribute	Type
routes	airline_iata	char(3)
	airline_id[4]	int
	src_iata_icao	char(4)
	source_id[5]	int
	target_iata_icao	char(4)
	target_id[6]	int
	code_share	char(1)
	equipment	char(20)

	Attribute	Type
airports	id	int
	name	varchar(255)
	city	varchar(255)
	country	varchar(255)
	iata	char(3)
	icao	char(4)
	lat	numeric(8,6)
	lon	numeric(9,6)
	alt	int
	timezone	numeric(3,1)
	dst	char(1)
	tz	varchar(255)

* Filled colors in the 'Attribute' columns indicate references between relations
* The attributes in the (primary) key are underlined
* Relation and column names are case-insensitive in PostgreSQL

NOTE: The attribute codeshare in the table Routes can only assume two values: 'Y' or '' (empty string) corresponding to whether or not the flight is a codeshare, that is, not operated by Airline but another carrier. Read up on the 'CHECK' syntax and include it in your DDL statement(s).

[4] airline_id is a foreign key referencing **Airlines**(id)
[5] source_id is a foreign key referencing **Airports**(id)
[6] target_id is a foreign key referencing **Airports**(id)