# Exercise ERD.08 – Santa Claus

## 1 ERD Diagram

We are developing a database to help Northpole Inc. organize their upcoming big delivery event. Each country has multiple cities. Multiple children can live in each city. Based on their behavior children get a different amount of presents. Presents are grouped into categories (clothes, board games, electronics,...). Each present is also intended for a specific age range, e.g. <3, 3-5. The company is running several sleighs each manned with a Santa Claus clone and two helping elves. Thanks to different time zones each sleigh can be used for several shipment tours and thus also the personnel can be scheduled for more than one tour. Each tour has a single city as its target. Every kid gets all of his/her presents by a single tour. One city can be supplied by multiple tours delivering to different children with varying amounts of presents.

### 1.1 Identifying Entities

- 1. Find a couple of attributes for each entity
- 2. Select one (or more) of the attributes as primary key

#### 1.2 ERD – UML notation

Create an ERD diagram in UML notation which represents the entities and their relationships.

#### 2 Relational Model

Create the relations (including association tables) and mark primary and foreign keys.

 $\overline{DBI/INSY}$  5<sup>th</sup> term 1/1