1. The database is represented by its E-R model:

```
  Model:

  Factory
    Id_number   Town
    F_name

  Produce
    Parts_per_day

  Catalog
    Id_catalog   Material
    Part_name   Part_weight

  Produce:
    Make:
      Factory
      Id_catalog
      Part_name
      Part_weight

  Produce:
      Town

  Produce:
      Part_weight
```

- Write relation schema of this database (1 point)
- Write SQL query, that will print names of all products from catalog (Part_name) that are made from Steel (Material) and are produced in factory from Town Praha (2 points)
- Rewrite query from b) into relation algebra (1 points)
- Write SQL query that will print names of all products from catalog (Part_name) that are produced in total weight (sum of parts_per_day * Part_weight from all factories in database) bigger than 1000 kg. (3 points)