

Below you can find an example of how to translate an ER diagram with a self-join to SQL-DDL.

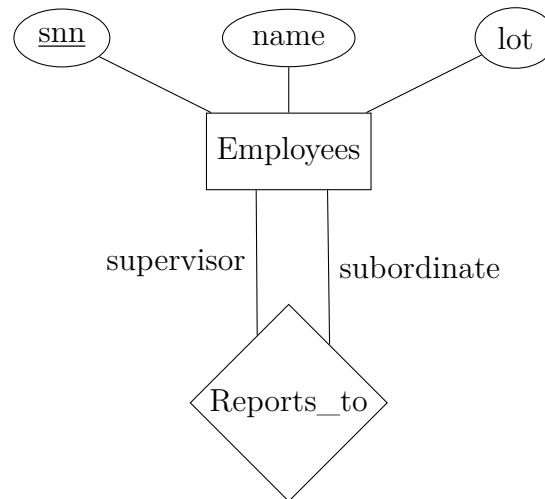


Figure 1: The **Reports\_to** relationship set

Consider the ER diagram in Figure 1. The role indicators *supervisor* and *subordinate* are used to create meaningful field names in the **CREATE** statement for the **Reports\_to** table:

```
CREATE TABLE Reports_to(  
  supervisor_ssn INTEGER,  
  subordinate_ssn INTEGER,  
  PRIMARY KEY (supervisor_ssn, subordinate_ssn),  
  FOREIGN KEY (supervisor_ssn) REFERENCES Employees(ssn),  
  FOREIGN KEY (subordinate_ssn) REFERENCES Employees(ssn)  
);
```

Observe that we need to explicitly name the referenced field of **Employees** because the field name differs from the name(s) of the referring field(s).

Hint: In case you wish to solve the assignment bonus task and include aggregation in your database, we recommend reading §3.5.7 of *Database Management Systems* which covers *Translating ER Diagrams with Aggregation*.