

2. Specify the query using relational algebra. (20 points)

Retrieve the name (first name, last name) of the employee who is either a manager or a supervisor.

Answer:

$\text{mgrSSN}(\text{SSN}) \longleftarrow \pi_{\text{MGRSSN}} (\text{DEPARTMENT})$

$\text{superSSN}(\text{SSN}) \longleftarrow \pi_{\text{SUPERSSN}} (\text{EMPLOYEE})$

$\text{allMSSN} \longleftarrow \text{mgrSSN} \cup \text{superSSN}$

$\text{mInfo} \longleftarrow \text{allMSSN} * \text{EMPLOYEE}$

$\text{Result} \longleftarrow \pi_{\text{FNAME, LNAME}} (\text{mInfo})$