1.

∏ ID, person\_name (σ company\_name = "BigBank"(works))

∏ ID, person\_name, city(σ company\_name = "BigBank"(works\*employee))

∏ ID, person\_name, city, street(σ company\_name = "BigBank"(works\*employee) ^ σ salary > 10000(works\*employee))

∏ ID, person\_name(σ employee.city = company.city(employee\*works\*company) ^ σ works.company\_name = company.company\_name (employee\*works\*company))

2.

∏ ID, person\_name (σ company\_name != "BigBank"(works))

∏ ID, person\_name (σ salary >= (∏ salary(works))(works))

3.  
delete from instructor where(dept\_name == “BigBank”);

insert into instructor (dept\_name)

Values(New\_dept\_name);

4.

ID, person\_name