The First Assignment

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Answer:

2.13:

a.∏loan\_number(σamount>10000(loan))

b.∏customer\_name(σbalance>6000(depositor ⋈account))

c.∏customer\_name(σbalance>6000∧branch\_name=“Uptown”(depositor ⋈ account))

3.24:

**select** **distinct** dept\_name

**from** instructor

**where**

(**select** sum(salary)

**from** instructor) >= (**select avg**(sum\_salary)

**from**

(**select sum**(salary) **as** sum\_salary

**from** instructor

**group by** department))

4.12

Using an outer join:

**select** employee\_name

**from** employee **natural** **left outer join** manages

**where** manager\_name **is null**

Not using an outer join:

**select** employee\_name

**from** employee employ

**where not exists**

(**select** employee\_name

**from** manages manage

**where** employ.employee\_name = manage.employee\_name **and**

manage.manager\_name **is not null**)