**Laborotory work 1**

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№1 ex:

a) П(id,person\_name) (σ(company\_name) = “BigBank” (works))l

b) Пid,person\_name,city(employee 

(σcompany\_name = “BigBank”(works)))

c) Пid,person\_name, street, city (σ(company-name = “BigBank” ∧ salary > 10000) works  employee )

d) Πperson\_name (employee  works company)

№2 ex:

a) Πid,person\_name (σcompany\_name  “BigBank” (works)

b) Πperson\_name (works) − (Πworks.person\_name (works  (works.salary ≤ works2.salary ∧ works2.company\_name = “BigBank”) ρworks2(works)))

№3 ex:

Answer:

• Inserting a tuple: (01100, Malaysia, Oxford, 333,000) into the instructor table, where the department table does not have the department Oxford, would violate the foreign key constraint.

• Deleting the tuple: (Physics, Sherlock, 65000) from the department table, where at least one student or instructor tuple has dept name as Physics, would violate the foreign key constraint.

№4 ex:

For example, students are usually assigned unique identification numbers( IDs), and all adults receive government-assigned and uniquely identifiable social security numbers.