1. Done by: Adesh Dias

a. ΠID, person_name (σcompany_name = “BigBank” (works))

b. ΠID, person_name, city (employee⋈ (σcompany_name = “BigBank”(works)))

c. ΠID, person_name, street, city(σ (company_name = “BigBank” ∧ salary > 10000)works⋈ employee)

d. ΠID, person_name (employee⋈works⋈company)

2.

e. Π ID, person_name (σ company_name≠ “BigBank” (works))

f. Πperson_name (works) − (Πworks.person_name (works ⋈ (works.salary≥ works2.salary)ρworks2(works)))

3.

Inserting a tuple: (23455, Jordan, Marketing, 45000 )intotheinstructortable, wherethedepartmenttabledoesnothavethedepartmentMarketing, wouldviolatetheforeignkeyconstraint.

Deletingthetuple: (Physics, Watson, 75000) fromthedepartmenttable, whereatleastonestudentorinstructortuplehasdeptnameasPhysics, wouldviolatetheforeignkeyconstraint

4. ID