

## ASSIGNMENT

1- Find the ID and name of each employee who does not work for “BigBank”

$\Pi_{\text{personName}, \text{ID}}(\sigma_{\text{companyName} \neq \text{'BigBank'}}(\text{employee} \bowtie \text{works}))$

2- Find the ID, name and city of residence of each employee who works for “BigBank”

$\Pi_{\text{personName}, \text{ID}, \text{city}}(\sigma_{\text{companyname} = \text{'BigBank'}}(\text{employee} \bowtie \text{works}))$

3- Find the ID, name, street address and city of residence of each employee who works for “BigBank” and earns more than \$10000.

$\Pi_{\text{personName}, \text{ID}, \text{city}, \text{street}}(\sigma_{\text{companyname} \neq \text{'BigBank'} \wedge \text{salary} > 10000}(\text{employee} \bowtie \text{works}))$

4- Find the ID and name of each employee in this database who lives in the same city as the company for which she or he works.

$\Pi_{\text{person-name}}(\text{employee} \bowtie \text{works} \bowtie \text{company})$

5- Find the ID and name of each employee who earns at least as much as every employee in the database

$\pi_{\text{ID}, \text{person\_name}}(\text{Employee} \bowtie (\pi_{\text{ID}}(\text{Works}) - (\pi_{\text{Works.ID}}(\text{Works} \bowtie (\text{Works.salary} < \text{Works2.salary}) \rho_{\text{Works2}}(\text{Works}))))))$