1. П id, person\_name ( SIGMA company\_name = “BigBank”(works))
2. П id, person\_name, city ( SIGMA company\_name =”BigBank”(works X employee))
3. П id, person\_name, street, city ( SIGMA company\_name = “BigBank” ^ avg(salary) > $10000 (works X employee))
4. П id, person\_name ( SIGMA employee.city = company.city (employee X company))

2

1. П id, person\_name (SIGMA ¬company\_name = “BigBank”(works))
2. П id, person\_name (SIGMA salary ≥ avg(salary) (employee))

3

Inserting tuple to INSTRUCTOR that does not exist in the department relation would cause a violation

Deleting from INSTRUCTOR where dept\_name would cause a violation

For example biology Watson 90000 would violate

4

Street and salary are primary keys because they are unique.