2.1 :

person_name : 因为员工的名字在其属性中最能唯一标识一条记录

person_name : 理由同上

company_name : 理由同上

2.6 :

a. $\Pi_{person\_name} (\sigma_{city = "Miami"} (employee))$

b. $\Pi_{person\_name} (\sigma_{salary > 100000} (works \bowtie employee))$

c. $\Pi_{person\_name} (\sigma_{city = "Miami" \wedge salary > 100000} (employee \bowtie works))$

2.7 :

a. $\Pi_{branch\_name} (\sigma_{branch\_city = "Chicago"} (branch))$

b. $\Pi_{ID} (\sigma_{branch\_name = "Downtown"} (borrower \bowtie loan))$