

(a)

(1) Inner join

Company.id	Company.name	state	Employee.id	Employee.name	company_id
1	ThisCo	CA	3	Mary	1
3	ThatCo	TX	2	Joe	3
5	TheOtherCo	KS	4	Elizabeth	5

(2) Left Outer Join

Company.id	Company.name	state	Employee.id	Employee.name	company_id
1	ThisCo	CA	3	Mary	1
3	ThatCo	TX	2	Joe	3
5	TheOtherCo	KS	4	Elizabeth	5
8	AnotherCo	OK	null	null	null

(3) Right Outer

Company.id	Company.name	state	Employee.id	Employee.name	company_id
1	ThisCo	CA	3	Mary	1
3	ThatCo	TX	2	Joe	3
5	TheOtherCo	KS	4	Elizabeth	5
null	null	null	5	John	7

(4) Full Outer Join

Company.id	Company.name	state	Employee.id	Employee.name	company_id
1	ThisCo	CA	3	Mary	1
3	ThatCo	TX	2	Joe	3
5	TheOtherCo	KS	4	Elizabeth	5
null	null	null	5	John	7
8	AnotherCo	OK	null	null	null

(b)

(1) Natural Inner Join

id	name	state	Company_id

(2) Cross joins

Company.id	Company.name	state	Employee.id	Employee.name	company_id
1	ThisCo	CA	2	Joe	3
1	ThisCo	CA	3	Mary	1
1	ThisCo	CA	4	Elizabeth	5
1	ThisCo	CA	5	John	7
3	ThatCo	TX	2	Joe	3

3	ThatCo	TX	3	Mary	1
3	ThatCo	TX	4	Elizabeth	5
3	ThatCo	TX	5	John	7
5	TheOtherCo	KS	2	Joe	3
5	TheOtherCo	KS	3	Mary	1
5	TheOtherCo	KS	4	Elizabeth	5
5	TheOtherCo	KS	5	John	7
8	AnotherCo	OK	2	Joe	3
8	AnotherCo	OK	3	Mary	1
8	AnotherCo	OK	4	Elizabeth	5
8	AnotherCo	OK	5	John	7