Entity Relationship Diagram (Logical)

JC_EMP
- # * EMPNO
- * EFNAME
- * ELNAME
- * JOB
- o MGR
- * HIREDATE
- * SAL
- o COMM

JC_DEPT
- # * DEPTNO
- * DNAME
- * LOC

JC_EMP_PROJECT
- * HOURS

JC_SALGRADE
- * GRADE
- * HISAL
- * LOSAL

JC_PROJECT
- # * PROJNO
- * PNAME
- * STARTDATE
- * ENDDATE

Relational Model (Physical)

JC_EMP
		Column	Type
P	*	EMPNO	NUMBER (4)
	*	EFNAME	VARCHAR2 (30)
	*	ELNAME	VARCHAR2 (30)
	*	JOB	VARCHAR2 (30)
F		MGR	NUMBER (4)
	*	HIREDATE	DATE
	*	SAL	NUMBER (7,2)
		COMM	NUMBER (7,2)
F	*	DEPTNO	NUMBER (2)

EMP_PK (EMPNO)

EMP_DEPT_FK (DEPTNO)
EMP_EMP_FK (MGR)

JC_DEPT
		Column	Type
P	*	DEPTNO	NUMBER (2)
	*	DNAME	VARCHAR2 (30)
	*	LOC	VARCHAR2 (30)
	*	DEPT_ID	NUMBER

DEPT_PK (DEPTNO)

JC_EMP_PROJECT
		Column	Type
	*	HOURS	NUMBER (4)
PF	*	EMPNO	NUMBER (4)
PF	*	PROJNO	NUMBER (3)

EMP_PROJECT_PK (PROJNO, EMPNO)

EMP_PROJECT_PROJECT_FK (PROJNO)
EMP_PROJECT_EMP_FK (EMPNO)

JC_SALGRADE
		Column	Type
P	*	GRADE	VARCHAR2 (2)
	*	HISAL	NUMBER (7,2)
	*	LOSAL	NUMBER (7,2)

SALGRADE_PK (GRADE)

JC_PROJECT
		Column	Type
P	*	PROJNO	NUMBER (3)
	*	PNAME	VARCHAR2 (30)
	*	STARTDATE	DATE
	*	ENDDATE	DATE

PROJECT_PK (PROJNO)

I have learned how to create a logical model and then convert this logical model to a relational model. After renaming the foreign kay column to the same column of primary key of the referenced table, I can generate the DDL script from the relational model.