1. Relational Schema

Student → Lecture (1-M)

Lecture | Lecture_id | Lecture name | courseid | Student_id |
PK FK

Student | Student_id | Student_name | Door | Street |
PK | City | State | Pin |

Lecture → Subject (1-1)

Subject | Lecture_id | Subject_id | Subject_name |
PK PK | Lecture_id |

Subject → Course (M-1)

Course | Course_id | Course_name |
PK

Course → Student (N-M)

Attends | Student_id | Course_id |
FK FK

Lecture → Course (N-M)

Takes → | Lecturer_id | Course_id |
FK FK

NN → xptr = C → xptr
NN → lptr = C

① C → xptr = NULL ②
(NN → xptr) → lptr = NN.

(curr → xptr) → xptr = curr → xptr.
free(curr → xptr)

2. Dependent - Employee (N-1)

Dependent | name | sex | birthdate | relation | SSN (FK)

Employee | SSN (PK) | birthdate | Salary | Address | Ename | Mname | last_name

Employee - Department (N-1)

Department | dep_name (PK) | location | no_of_emp

Department → Project (1-N)

Project | P_name (PK) | budget | location | dep_name (FK)

Project - Employee (N-M)

works | start_date | hours | P_name (FK) | SSN (FK)