create table Academy (

AcademyID varchar2(10) NOT NULL,

Academy\_Name varchar2(10),

Address varchar2(10),

EmailAddress varchar2(20),

PhoneNumber varchar2(10),

constraint Academy\_pk primary key (AcademyID)

);

create table AParent (

ParentID varchar2(10) NOT NULL,

Parent\_Name varchar2(10),

Address varchar2(10),

EmailAddress varchar2(20),

PhoneNumber varchar2(20),

Sex varchar2(1),

constraint Parent\_pk primary key(ParentID)

);

create table Employee (

EmployeeID varchar2(10) NOT NULL,

Employee\_Name varchar2(10),

EmailAddress varchar2(20),

PhoneNumber varchar2(20),

Sex varchar2(1),

Age varchar2(2),

AcademyID varchar2(10) NOT NULL,

Hire\_Date date,

constraint Employee\_pk primary key(EmployeeID),

constraint Employee\_fk foreign key (AcademyID) references Academy(AcademyID)

);

create table Teacher (

TeacherID varchar2(10) NOT NULL,

constraint Teacher\_pk primary key(TeacherID),

constraint Teacher\_fk foreign key (TeacherID) references Employee(EmployeeID)

);

create table Driver (

DriverID varchar2(10) NOT NULL,

constraint Driver\_pk primary key(DriverID),

constraint Driver\_fk foreign key (DriverID) references Employee(EmployeeID)

);

create table Bus (

BusNumber varchar2(10) NOT NULL,

Seater varchar2(10),

DriverID varchar2(10),

constraint Bus\_pk primary key(BusNumber),

constraint Bus\_fk foreign key (DriverID) references Driver(DriverID)

);

create table Bus\_AttendTime (

BusNumber varchar2(10) NOT NULL,

AttendTime varchar2(10) NOT NULL,

constraint Bus\_AttendTime\_pk primary key(BusNumber, AttendTime),

constraint Bus\_AttendTime\_fk foreign key (BusNumber) references Bus(BusNumber)

);

create table Bus\_LeaveTime (

BusNumber varchar2(10) NOT NULL,

LeaveTime varchar2(10) NOT NULL,

constraint Bus\_LeaveTime\_pk primary key(BusNumber, LeaveTime),

constraint Bus\_LeaveTime\_fk foreign key (BusNumber) references Bus(BusNumber)

);

create table Bus\_Spot (

BusNumber varchar2(10) NOT NULL,

Spot varchar2(10) NOT NULL,

constraint Bus\_Spot\_pk primary key(BusNumber, Spot),

constraint Bus\_Spot\_fk foreign key (BusNumber) references Bus(BusNumber)

);

create table Room (

RoomID varchar2(10) NOT NULL,

Status\_Of\_TV varchar2(10),

Status\_Of\_AirConditioner varchar2(10),

Status\_Of\_Blackboard varchar2(10),

Capacity varchar2(10),

constraint Room\_pk primary key(RoomID)

);

create table AClass (

ClassID varchar2(10) NOT NULL,

Class\_Level varchar2(10),

Start\_Time varchar2(10),

End\_Time varchar2(10),

RoomID varchar2(10),

TeacherID varchar2(10),

constraint Class\_pk primary key(ClassID),

constraint Class\_fk1 foreign key (RoomID) references Room(RoomID),

constraint Class\_fk2 foreign key (TeacherID) references Teacher(TeacherID)

);

create table Student (

StudentID varchar2(10) NOT NULL,

Student\_Name varchar2(10) NOT NULL,

SchoolName varchar2(10),

PhoneNumber varchar2(20),

Sex varchar2(1),

AcademyID varchar2(10) NOT NULL,

ParentID varchar2(10) NOT NULL,

ClassID varchar2(10) NOT NULL,

BusNumber varchar2(10),

Enroll\_Date date,

Ride\_Time varchar2(10),

GetOff\_Time varchar2(10),

Age varchar2(2),

constraint Student\_pk primary key(StudentID),

constraint Student\_fk1 foreign key (AcademyID) references Academy(AcademyID),

constraint Student\_fk2 foreign key (ClassID) references AClass(ClassID),

constraint Student\_fk3 foreign key (ParentID) references AParent(ParentID),

constraint Student\_fk4 foreign key (BusNumber) references Bus(BusNumber)

);

create table Hourly\_Employee (

EmployeeID varchar2(10) NOT NULL,

Hourly\_Rate varchar2(10),

constraint Hourly\_Employee\_pk primary key(EmployeeID),

constraint Hourly\_Employee\_fk foreign key (EmployeeID) references Employee(EmployeeID)

);

create table Salaried\_Employee (

EmployeeID varchar2(10) NOT NULL,

Salary varchar2(10),

Address varchar2(10),

constraint Salaried\_Employee\_pk primary key(EmployeeID),

constraint Salaried\_Employee\_fk foreign key (EmployeeID) references Employee (EmployeeID)

);

create table Subject (

SubjectID varchar2(10) NOT NULL,

Subject\_Name varchar2(10),

Exam\_Cutline varchar2(10),

constraint Subject\_pk primary key(SubjectID)

);

create table SubjectTeacher (

SubjectID varchar2(10) NOT NULL,

Teacher\_Name varchar2(10) NOT NULL,

constraint SubjectTeacher\_pk primary key(SubjectID, Teacher\_Name),

constraint SubjectTeacher\_fk foreign key (SubjectID) references Subject(SubjectID)

);

create table Failed\_Student (

TeacherID varchar2(10) NOT NULL,

SubjectID varchar2(10) NOT NULL,

FailedStudentID varchar2(10) NOT NULL,

constraint Failed\_Student\_pk primary key(SubjectID, TeacherID, FailedStudentID),

constraint Failed\_Student\_fk1 foreign key (SubjectID) references Subject(SubjectID),

constraint Failed\_Student\_fk2 foreign key (TeacherID) references Teacher(TeacherID)

);

create table AssignedClass (

ClassID varchar2(10) NOT NULL,

SubjectID varchar2(10) NOT NULL,

constraint AssignedClass\_pk primary key(ClassID, SubjectID),

constraint AssignedClass\_fk1 foreign key (ClassID) references AClass(ClassID),

constraint AssignedClass\_fk2 foreign key (SubjectID) references Subject(SubjectID)

);

insert into academy values (1, 'abc1', 'abc', 'abc1@abc.com', '123-1111');

insert into academy values (2, 'abc2', 'abc', 'abc2@abc.com', '123-2222');

insert into academy values (3, 'abc3', 'abc', 'abc3@abc.com', '123-3333');

insert into academy values (4, 'abc4', 'abc', 'abc4@abc.com', '123-4444');

insert into academy values (5, 'abc5', 'abc', 'abc5@abc.com', '123-5555');

insert into academy values (6, 'abc6', 'abc', 'abc6@abc.com', '123-6666');

insert into academy values (7, 'abc7', 'abc', 'abc7@abc.com', '123-7777');

insert into academy values (8, 'abc8', 'abc', 'abc8@abc.com', '123-8888');

insert into academy values (9, 'abc9', 'abc', 'abc9@abc.com', '123-9999');

insert into academy values (10, 'abc10', 'abc', 'abc10@abc.com', '123-1010');

insert into academy values (11, 'abc11', 'abc', 'abc11@abc.com', '123-0011');

insert into academy values (12, 'abc12', 'abc', 'abc12@abc.com', '123-1212');

insert into academy values (13, 'abc13', 'abc', 'abc13@abc.com', '123-1313');

insert into academy values (14, 'abc14', 'abc', 'abc14@abc.com', '123-1414');

insert into academy values (15, 'abc15', 'abc', 'abc15@abc.com', '123-1515');

insert into aparent values (1, 'sam', 'abc', 'sam@abc.com', '010-1212-0000', 'M');

insert into aparent values (2, 'sara', 'abc', 'sara@abc.com', '010-1111-0000', 'F');

insert into aparent values (3, 'candy', 'abc', 'candy@abc.com', '010-1212-3333', 'F');

insert into aparent values (4, 'jun', 'def', 'jun@abc.net', '010-2323-0000', 'M');

insert into aparent values (5, 'jhon', 'abc', 'jhon@abc.com', '011-2029-0000', 'M');

insert into aparent values (6, 'happy', 'def', 'happy@abc.com', '010-1212-0000', 'F');

insert into aparent values (7, 'new', 'def', 'happy@abc.com', '010-1212-0000', 'F');

insert into aparent values (8, 'coke', 'def', 'coke@abc.com', '010-1212-0000', 'F');

insert into aparent values (9, 'code', 'abc', 'code@abc.com', '010-1212-0000', 'F');

insert into aparent values (10, 'hope', 'abc', 'hope@abc.com', '010-1212-0000', 'F');

insert into aparent values (11, 'love', 'def', 'love@abc.com', '010-1212-0000', 'F');

insert into aparent values (12, 'like', 'abc', 'like@abc.com', '010-1212-0000', 'F');

insert into aparent values (13, 'seem', 'abc', 'seem@abc.com', '010-1212-0000', 'F');

insert into aparent values (14, 'daily', 'def', 'daily@abc.com', '010-1212-0000', 'F');

insert into aparent values (15, 'neo', 'def', 'neo@abc.com', '010-1212-0000', 'F');

insert into employee values (101, 'chris', 'chris@abc.com', '010-2020-2020', 'M', 28, 1, '2021-12-01');

insert into employee values (102, '홍길동', 'hong@abc.com', '010-1234-2020', 'M', 21, 1, '2020-10-01');

insert into employee values (103, '김철수', 'kcs@abc.com', '010-7262-2020', 'M', 22, 1, '2021-12-01');

insert into employee values (104, '김영희', 'kyh@abc.com', '010-2222-2020', 'F', 23, 1, '2021-12-01');

insert into employee values (105, 'mary', 'mary@abc.com', '010-2020-0283', 'F', 30, 1, '2021-12-01');

insert into employee values (106, 'tom', 'tom@abc.com', '010-8634-2020', 'M', 28, 1, '2020-10-01');

insert into employee values (107, '김영서', 'kys@abc.com', '010-9173-2020', 'F', 34, 1, '2019-10-01');

insert into employee values (108, '김선민', 'ksm@abc.com', '010-1037-2020', 'F', 34, 1, '2019-10-01');

insert into employee values (109, '배정연', 'bjy@abc.com', '010-3744-2020', 'F', 34, 1, '2019-10-01');

insert into employee values (110, '가나다', 'GND@abc.com', '010-2939-2020', 'F', 40, 1, '2019-12-01');

insert into employee values (111, '라마바', 'rmb@abc.com', '010-1212-2320', 'M', 35, 1, '2019-12-01');

insert into employee values (112, 'jun', 'jun@abc.com', '010-1212-2320', 'M', 25, 1, '2022-12-01');

insert into employee values (113, '김영수', 'kys2@abc.com', '010-1212-2320', 'M', 27, 1, '2020-12-01');

insert into employee values (114, '김영우', 'kyw@abc.com', '010-1212-2320', 'M', 30, 1, '2021-12-01');

insert into employee values (115, '유재석', 'yjs@abc.com', '010-1212-2320', 'M', 25, 1, '2021-12-01');

insert into employee values (116, '강래현', 'rmb4342@abc.com', '010-1212-2320', 'M', 35, 1, '2019-12-01');

insert into employee values (117, '장채은', 'rmb43434@abc.com', '010-1212-2320', 'M', 35, 1, '2019-12-01');

insert into employee values (118, '장나라', 'rmb434344@abc.com', '010-1212-2320', 'M', 35, 1, '2019-12-01');

insert into employee values (119, '강동원', 'rmb43364@abc.com', '010-1212-2320', 'M', 35, 1, '2019-12-01');

insert into employee values (120, '원빈', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 5, '2019-12-01');

insert into employee values (121, '소지섭', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 3, '2019-12-01');

insert into employee values (122, '김가람', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 11, '2019-12-01');

insert into employee values (123, '임성민', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 12, '2019-12-01');

insert into employee values (124, '장그래', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 15, '2019-12-01');

insert into employee values (125, '강하늘', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 10, '2019-12-01');

insert into employee values (126, '송중기', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 15, '2019-12-01');

insert into employee values (127, '김길현', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 14, '2019-12-01');

insert into employee values (128, '구하라', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 13, '2019-12-01');

insert into employee values (129, '라미란', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 12, '2019-12-01');

insert into employee values (130, '강지연', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 11, '2019-12-01');

insert into employee values (131, '고한별', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 10, '2019-12-01');

insert into employee values (132, '이한빈', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 9, '2019-12-01');

insert into employee values (133, '유채은', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 8, '2019-12-01');

insert into employee values (134, '고동현', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 7, '2019-12-01');

insert into employee values (135, '강정우', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 6, '2019-12-01');

insert into employee values (136, '고아라', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 6, '2019-12-01');

insert into employee values (137, '김태희', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 4, '2019-12-01');

insert into employee values (138, '장원빈', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 5, '2019-12-01');

insert into employee values (139, '고원빈', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 5, '2019-12-01');

insert into employee values (140, '창원빈', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 3, '2019-12-01');

insert into employee values (141, '곡원빈', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 3, '2019-12-01');

insert into employee values (142, '장아라미', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 10, '2019-12-01');

insert into employee values (143, '한아름송이', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 10, '2019-12-01');

insert into employee values (144, '홍영기', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 2, '2019-12-01');

insert into employee values (145, '홍준표', 'rmb434@abc.com', '010-1212-2320', 'M', 35, 2, '2019-12-01');

insert into salaried\_employee values (101, 2500, 'abc');

insert into salaried\_employee values (102, 2500, 'def');

insert into salaried\_employee values (103, 2500, 'abc');

insert into salaried\_employee values (104, 4000, 'abc');

insert into salaried\_employee values (105, 2500, 'def');

insert into salaried\_employee values (106, 2500, 'abc');

insert into salaried\_employee values (107, 4000, 'abc');

insert into salaried\_employee values (108, 4000, 'zzz');

insert into salaried\_employee values (109, 4000, 'zzz');

insert into salaried\_employee values (110, 2000, 'zzz');

insert into salaried\_employee values (111, 2000, 'abc');

insert into salaried\_employee values (112, 2000, 'abc');

insert into salaried\_employee values (113, 2000, 'abc');

insert into salaried\_employee values (114, 2000, 'def');

insert into salaried\_employee values (115, 2000, 'def');

insert into salaried\_employee values (116, 2000, 'abc');

insert into salaried\_employee values (117, 2000, 'abc');

insert into salaried\_employee values (118, 2000, 'abc');

insert into salaried\_employee values (119, 2000, 'abc');

insert into salaried\_employee values (120, 2000, 'abc');

insert into salaried\_employee values (121, 2000, 'abc');

insert into salaried\_employee values (122, 2000, 'abc');

insert into salaried\_employee values (123, 2000, 'abc');

insert into salaried\_employee values (124, 2000, 'abc');

insert into salaried\_employee values (125, 2000, 'abc');

insert into salaried\_employee values (126, 2000, 'abc');

insert into salaried\_employee values (127, 2000, 'abc');

insert into salaried\_employee values (128, 2000, 'abc');

insert into salaried\_employee values (129, 2000, 'abc');

insert into salaried\_employee values (130, 2000, 'abc');

insert into hourly\_employee values (131, 12);

insert into hourly\_employee values (132, 10);

insert into hourly\_employee values (133, 10);

insert into hourly\_employee values (134, 10);

insert into hourly\_employee values (135, 10);

insert into hourly\_employee values (136, 10);

insert into hourly\_employee values (137, 10);

insert into hourly\_employee values (138, 10);

insert into hourly\_employee values (139, 10);

insert into hourly\_employee values (140, 10);

insert into hourly\_employee values (141, 10);

insert into hourly\_employee values (142, 10);

insert into hourly\_employee values (143, 12);

insert into hourly\_employee values (144, 10);

insert into hourly\_employee values (145, 10);

insert into teacher values (101);

insert into teacher values (102);

insert into teacher values (103);

insert into teacher values (104);

insert into teacher values (105);

insert into teacher values (106);

insert into teacher values (107);

insert into teacher values (108);

insert into teacher values (109);

insert into teacher values (110);

insert into teacher values (111);

insert into teacher values (112);

insert into teacher values (113);

insert into teacher values (114);

insert into teacher values (115);

insert into driver values (116);

insert into driver values (117);

insert into driver values (118);

insert into driver values (119);

insert into driver values (120);

insert into driver values (121);

insert into driver values (122);

insert into driver values (123);

insert into driver values (124);

insert into driver values (125);

insert into driver values (126);

insert into driver values (127);

insert into driver values (128);

insert into driver values (129);

insert into driver values (130);

insert into bus values (1,45,116);

insert into bus values (2,30,117);

insert into bus values (3,20,118);

insert into bus values (4,20,119);

insert into bus values (5,15,120);

insert into bus values (6,15,121);

insert into bus values (7,20,122);

insert into bus values (8,20,123);

insert into bus values (9,20,124);

insert into bus values (10,20,125);

insert into bus values (11,20,126);

insert into bus values (12,22,127);

insert into bus values (13,23,128);

insert into bus values (14,24,129);

insert into bus values (15,25,130);

insert into bus\_attendtime values (2, '14:40');

insert into bus\_attendtime values (1, '15:40');

insert into bus\_attendtime values (3, '14:40');

insert into bus\_attendtime values (4, '15:40');

insert into bus\_attendtime values (5, '14:40');

insert into bus\_attendtime values (6, '15:40');

insert into bus\_attendtime values (7, '14:40');

insert into bus\_attendtime values (8, '15:40');

insert into bus\_attendtime values (2, '16:40');

insert into bus\_attendtime values (1, '17:50');

insert into bus\_attendtime values (2, '19:00');

insert into bus\_attendtime values (3, '16:40');

insert into bus\_attendtime values (4, '17:50');

insert into bus\_attendtime values (3, '19:00');

insert into bus\_attendtime values (5, '16:40');

insert into bus\_attendtime values (6, '17:50');

insert into bus\_attendtime values (5, '19:00');

insert into bus\_leavetime values (2, '17:20');

insert into bus\_leavetime values (1, '18:30');

insert into bus\_leavetime values (2, '19:50');

insert into bus\_leavetime values (2, '22:10');

insert into bus\_leavetime values (3, '17:20');

insert into bus\_leavetime values (4, '18:30');

insert into bus\_leavetime values (3, '19:50');

insert into bus\_leavetime values (3, '22:10');

insert into bus\_leavetime values (5, '17:20');

insert into bus\_leavetime values (6, '18:30');

insert into bus\_leavetime values (5, '19:50');

insert into bus\_leavetime values (5, '22:10');

insert into bus\_leavetime values (7, '17:20');

insert into bus\_leavetime values (8, '18:30');

insert into bus\_leavetime values (7, '19:50');

insert into bus\_leavetime values (7, '22:10');

insert into bus\_spot values (2, 'abc');

insert into bus\_spot values (2, 'def');

insert into bus\_spot values (1, 'abc');

insert into bus\_spot values (1, 'def');

insert into bus\_spot values (3, 'abc');

insert into bus\_spot values (3, 'def');

insert into bus\_spot values (4, 'abc');

insert into bus\_spot values (4, 'def');

insert into bus\_spot values (5, 'abc');

insert into bus\_spot values (5, 'def');

insert into bus\_spot values (6, 'abc');

insert into bus\_spot values (6, 'def');

insert into room values (1, 'broken', 'nomal', 'nomal', 25);

insert into room values (2, 'nomal', 'nomal', 'none', 20);

insert into room values (3, 'nomal', 'nomal', 'none', 20);

insert into room values (4, 'nomal', 'nomal', 'nomal', 30);

insert into room values (5, 'nomal', 'nomal', 'none', 20);

insert into room values (6, 'nomal', 'nomal', 'none', 20);

insert into room values (7, 'nomal', 'nomal', 'nomal', 25);

insert into room values (8, 'nomal', 'nomal', 'none', 20);

insert into room values (9, 'nomal', 'nomal', 'none', 20);

insert into room values (10, 'broken', 'nomal', 'none', 20);

insert into room values (11, 'nomal', 'nomal', 'none', 20);

insert into room values (12, 'nomal', 'nomal', 'none', 20);

insert into room values (13, 'nomal', 'broken', 'normal', 30);

insert into room values (14, 'nomal', 'nomal', 'none', 20);

insert into room values (15, 'nomal', 'nomal', 'none', 20);

insert into aclass values (1011, 'E-L1', '15:20', '17:20', 1, 107);

insert into aclass values (1012, 'E-L2', '15:20', '17:20', 2, 107);

insert into aclass values (1021, 'E-M1', '15:20', '17:20', 3, 107);

insert into aclass values (1022, 'E-M2', '15:20', '17:20', 5, 107);

insert into aclass values (1031, 'E-H1', '16:20', '18:20', 4, 107);

insert into aclass values (1032, 'E-H2', '16:20', '18:20', 4, 107);

insert into aclass values (2011, 'M-L1', '17:20', '19:20', 1, 108);

insert into aclass values (2021, 'M-M1', '17:20', '19:20', 2, 108);

insert into aclass values (2022, 'M-M2', '17:20', '19:20', 2, 108);

insert into aclass values (2031, 'M-H1', '18:20', '20:20', 3, 108);

insert into aclass values (3011, 'H-L1', '19:40', '21:40', 1, 109);

insert into aclass values (3012, 'H-L2', '19:40', '21:40', 1, 109);

insert into aclass values (3021, 'H-M1', '19:40', '21:40', 7, 109);

insert into aclass values (3022, 'H-M2', '19:40', '21:40', 7, 109);

insert into aclass values (3031, 'H-H1', '19:40', '21:40', 4, 109);

insert into student values (1001, 'andy', 'abc 초등', '010-2020-4932', 'F', 1, 1, 1012, null, '2021-10-01', null, null, 12);

insert into student values (1002, 'bob', 'abc 중등', '010-1212-4932', 'M', 1, 1, 1011, null, '2021-10-01', null, null, 13);

insert into student values (1003, 'coll', 'abc 초등', '010-3434-4932', 'M', 1, 2, 1021, 2, '2021-10-01', '14:50', '17:43', 13);

insert into student values (1004, 'dive', 'abc 초등', '010-4444-4932', 'F', 1, 3, 1021, 2, '2021-10-01', '14:30', '17:50', 10);

insert into student values (1005, 'elv', 'abc 중등', '010-3565-4932', 'M', 1, 4, 1032, 1, '2021-10-01', '15:50', null, 15);

insert into student values (1006, 'five', 'abc 중등', '010-3320-4932', 'F', 1, 5, 2011, 1, '2021-10-01', '15:48', '19:59', 14);

insert into student values (1007, 'girl', 'abc 초등', '010-3333-4932', 'M', 1, 5, 1022, 1, '2021-10-01', '15:48', '19:59', 9);

insert into student values (1008, 'high', 'abc 고등', '010-5656-4932', 'M', 1, 6, 3011, 2, '2021-10-01', '19:20', '22:33', 18);

insert into student values (1009, 'info', 'def 고등', '010-3423-4932', 'F', 1, 7, 3012, 2, '2021-10-01', null, '22:33', 18);

insert into student values (1010, 'jack', 'def 고등', '010-4564-4932', 'F', 1, 8, 3012, 2, '2021-10-01', '19:30', '22:23', 17);

insert into student values (1011, 'koko', 'abc 고등', '010-2435-4932', 'M', 1, 9, 3031, 2, '2021-10-01', '19:20', '22:33', 18);

insert into student values (1012, 'lim', 'def 고등', '010-7644-4932', 'F', 1, 10, 3031, 2, '2021-10-01', null, '22:33', 18);

insert into student values (1013, 'nave', 'def 고등', '010-4354-4932', 'F', 1, 11, 3021, 2, '2021-10-01', '19:30', '22:23', 17);

insert into student values (1014, 'pop', 'def 고등', '010-2794-4932', 'F', 1, 12, 3022, 2, '2021-10-01', '19:30', '22:23', 17);

insert into student values (1015, 'puppy', 'def 고등', '010-2485-4932', 'M', 1, 13, 3021, 2, '2021-10-01', '19:30', '22:23', 17);

insert into student values (1016, 'rock', 'def 고등', '010-1243-4932', 'F', 1, 14, 3021, 2, '2021-10-01', '19:30', '22:23', 17);

insert into student values (1017, 'coco', 'def 고등', '010-7578-4932', 'F', 1, 15, 3021, 2, '2021-10-01', '19:30', '22:23', 17);

insert into subject values (1, '듣기EL', 45);

insert into subject values (2, '듣기EM', 45);

insert into subject values (3, '듣기EH', 45);

insert into subject values (4, '듣기ML', 45);

insert into subject values (5, '듣기MM', 45);

insert into subject values (6, '듣기MH', 45);

insert into subject values (7, '듣기HL', 45);

insert into subject values (8, '듣기HM', 45);

insert into subject values (9, '듣기HH', 45);

insert into subject values (10, '쓰기EL', 50);

insert into subject values (11, '쓰기EM', 50);

insert into subject values (12, '쓰기EH', 50);

insert into subject values (13, '쓰기ML', 50);

insert into subject values (14, '쓰기MM', 50);

insert into subject values (15, '쓰기MH', 50);

insert into subject values (16, '쓰기HL', 50);

insert into subject values (17, '쓰기HM', 50);

insert into subject values (18, '쓰기HH', 50);

insert into subject values (19, '문법EL', 45);

insert into subject values (20, '문법EM', 45);

insert into subject values (21, '문법EH', 45);

insert into subject values (22, '문법ML', 45);

insert into subject values (23, '문법MM', 45);

insert into subject values (24, '문법MH', 45);

insert into subject values (25, '문법HL', 45);

insert into subject values (26, '문법HM', 45);

insert into subject values (27, '문법HH', 45);

insert into subjectTeacher values (1, 'chris');

insert into subjectTeacher values (2, 'chris');

insert into subjectTeacher values (3, 'chris');

insert into subjectTeacher values (4, 'mary');

insert into subjectTeacher values (5, 'mary');

insert into subjectTeacher values (6, 'mary');

insert into subjectTeacher values (7, 'tom');

insert into subjectTeacher values (8, 'tom');

insert into subjectTeacher values (9, 'tom');

insert into subjectTeacher values (10, '김영서');

insert into subjectTeacher values (11, '김영서');

insert into subjectTeacher values (12, '김영서');

insert into subjectTeacher values (19, '김영서');

insert into subjectTeacher values (20, '김영서');

insert into subjectTeacher values (21, '김영서');

insert into subjectTeacher values (13, '김선민');

insert into subjectTeacher values (14, '김선민');

insert into subjectTeacher values (15, '김선민');

insert into subjectTeacher values (22, '김선민');

insert into subjectTeacher values (23, '김선민');

insert into subjectTeacher values (24, '김선민');

insert into subjectTeacher values (16, '배정연');

insert into subjectTeacher values (17, '배정연');

insert into subjectTeacher values (18, '배정연');

insert into subjectTeacher values (25, '배정연');

insert into subjectTeacher values (26, '배정연');

insert into subjectTeacher values (27, '배정연');

insert into subjectTeacher values (16, '홍길동');

insert into subjectTeacher values (17, '김철수');

insert into subjectTeacher values (18, '김영희');

insert into failed\_student values (107, 1, 1001);

insert into failed\_student values (107, 10, 1001);

insert into failed\_student values (107, 2, 1003);

insert into failed\_student values (107, 20, 1004);

insert into failed\_student values (108, 21, 1005);

insert into failed\_student values (108, 13, 1006);

insert into failed\_student values (109, 25, 1009);

insert into failed\_student values (109, 8, 1013);

insert into failed\_student values (109, 26, 1013);

insert into failed\_student values (109, 8, 1015);

insert into failed\_student values (109, 26, 1015);

insert into failed\_student values (109, 8, 1016);

insert into failed\_student values (109, 26, 1016);

insert into failed\_student values (109, 8, 1017);

insert into failed\_student values (109, 26, 1017);

insert into assignedclass values (1011, 10);

insert into assignedclass values (1011, 19);

insert into assignedclass values (1012, 1);

insert into assignedclass values (1012, 10);

insert into assignedclass values (1021, 2);

insert into assignedclass values (1021, 20);

insert into assignedclass values (1022, 2);

insert into assignedclass values (1022, 11);

insert into assignedclass values (1031, 3);

insert into assignedclass values (1031, 21);

insert into assignedclass values (1032, 3);

insert into assignedclass values (1032, 21);

insert into assignedclass values (2011, 5);

insert into assignedclass values (2011, 22);

insert into assignedclass values (2021, 5);

insert into assignedclass values (2021, 23);

insert into assignedclass values (2022, 5);

insert into assignedclass values (2022, 14);

insert into assignedclass values (2031, 6);

insert into assignedclass values (2031, 24);

insert into assignedclass values (3011, 7);

insert into assignedclass values (3011, 25);

insert into assignedclass values (3012, 16);

insert into assignedclass values (3012, 25);

insert into assignedclass values (3021, 8);

insert into assignedclass values (3021, 26);

insert into assignedclass values (3022, 26);

insert into assignedclass values (3022, 8);

insert into assignedclass values (3031, 18);

insert into assignedclass values (3031, 27);

<유효 SQL문>

1.낙제한 학생의 부모에게 전화하기 위한 명단

select distinct student.studentid, student\_name, parent\_name, aparent.phoneNumber from student, failed\_student, aparent

where student.studentId = failed\_student.failedstudentid and student.parentid = aparent.parentid

order by student.studentid;

2.낙제한 학생 중 버스를 타는 학생에게 전달해줄 버스 시간표

select student\_name, bus\_leavetime.busnumber, leavetime from student, failed\_student, bus\_leavetime

where student.studentId = failed\_student.failedstudentid

and student.busnumber = bus\_leavetime.busnumber

and student.busnumber is not null

order by studentId;

3.각 담임 선생 별 관리하는 학생 명단

select classId, student\_name, class\_level, roomId, student.age, student.sex, schoolname from student natural join aclass

where teacherId = 107

order by classId;

select classId, student\_name, class\_level, roomId, student.age, student.sex, schoolname from student natural join aclass

where teacherId = 108

order by classId;

select classId, student\_name, class\_level, roomId, student.age, student.sex, schoolname from student natural join aclass

where teacherId = 109

order by classId;

4.담임 선생이 담당하는 학생 총 수

select teacherId, employee\_name as Teacher\_Name, count(studentId)

as total\_student from employee, student

natural join aclass where employee.employeeid = aclass.teacherid

group by teacherID, employee\_name

order by teacherId;

5. 버스기사가 관리하는 학생 명단

select driver.driverid, student.busnumber, student\_name, student.age, student.sex, schoolname

from driver, student, bus

where driver.driverid = bus.driverid and

student.busnumber = bus.busnumber

order by driver.driverid;

6. 버스기사가 관리하는 학생 총 수

select driver.driverid, bus.busnumber, count(studentid) as num\_Of\_students\_in\_charge

from driver, student, bus

where driver.driverid = bus.driverid and

student.busnumber = bus.busnumber

group by driver.driverid, bus.busnumber

order by driver.driverid;

7. 낙제생이 시험봐야 할 재시험 과목 명단

create view reexamination\_list as

select failedStudentId, subject\_name as subject\_of\_reexamination from subject left outer join Failed\_Student on subject.subjectId = failed\_student.subjectId

order by failedStudentId;

select failedStudentId, student\_name, subject\_of\_reexamination from reexamination\_list, student

where reexamination\_list.failedStudentId = student.studentId;

8. 조교가 출력해야 하는 시험지 개수 명단

select subject\_of\_reexamination, count(failedStudentId) as print from reexamination\_list

group by subject\_of\_reexamination

having count(failedStudentId)>0;

9.학생별 오늘 듣는 수업과 현재 수업듣고 있는 방을 확인하기 위한 명단

select distinct StudentID, Student\_Name, AssignedClass.ClassID, Subject\_Name, AClass.RoomID

from Student, AClass, Room, AssignedClass, Subject

where Student.ClassID = AClass.ClassID and

AClass.RoomID = Room.RoomID and

AssignedClass.ClassID = AClass.ClassID and

AssignedClass.SubjectID = Subject.SubjectID

order by StudentID;

10.학생별 시험에 통과했는지 못했는지 여부 확인

create view pass\_or\_not\_list as

select distinct studentId, student\_name, failedStudentId as Pass\_or\_not, student.classid

from student left outer join Failed\_Student on student.studentid=failed\_student.failedstudentid

order by studentId;

1) 전체 학생 조회

select studentId, student\_name, Pass\_or\_not from pass\_or\_not\_list;

2) 담임 선생별 조회

select studentId, student\_name, pass\_or\_not from pass\_or\_not\_list natural join aclass

where aclass.teacherid = 107;

select studentId, student\_name, pass\_or\_not from pass\_or\_not\_list natural join aclass

where aclass.teacherid = 108;

select studentId, student\_name, pass\_or\_not from pass\_or\_not\_list natural join aclass

where aclass.teacherid = 109;

11. 방에 고장난 티비가 있는 지 확인

select roomID as Broken\_TV\_RoomID

from room where status\_of\_tv = 'broken';

12. 방에 고장난 에어컨이 있는 지 확인

select roomID as Broken\_Aircon\_RoomID

from room where status\_of\_airconditioner = 'broken';