CREATE TABLE course(

2 courseid INT,

3 coursename VARCHAR(50) NOT NULL,

4 attendence INT NOT NULL,

5 credits INT NOT NULL);

ALTER TABLE course ADD CONSTRAINT course\_pk PRIMARY KEY ( courseid );

CREATE TABLE teacher(

2 ssn VARCHAR(15),

3 name VARCHAR(50) NOT NULL,

4 department VARCHAR(50) NOT NULL,

5 skills VARCHAR(100),

6 yearslysalary DECIMAL(10, 2) NOT NULL);

ALTER TABLE teacher ADD CONSTRAINT teacher\_pk PRIMARY KEY (ssn);

create table rooms(

2 room\_number INT,

3 room\_type VARCHAR(20) NOT NULL,

4 capacity INT NOT NULL);

ALTER TABLE rooms ADD CONSTRAINTS room\_pk PRIMARY KEY(room\_number);

create table class\_period(

2 period\_number INT,

3 starting\_time TIMESTAMP NOT NULL,

4 ending\_time TIMESTAMP NOT NULL);

ALTER TABLE class\_period ADD CONSTRAINT class\_period\_pk PRIMARY KEY(period\_number);

create table class\_period(

2 period\_number INT,

3 starting\_time TIMESTAMP NOT NULL,

4 ending\_time TIMESTAMP NOT NULL);

ALTER TABLE class\_period ADD CONSTRAINT class\_period\_pk PRIMARY KEY(period\_number);

ALTER TABLE rooms ADD CONSTRAINTS room\_pk PRIMARY KEY(room\_number);

create table schedule (

2 scheduleId INT,

3 courseid INT,

4 ssn VARCHAR(15),

5 room\_number INT,

6 period\_number INT);

ALTER TABLE schedule ADD CONSTRAINTS courseid\_fk foreign key(courseid) REFERENCES course(courseid);

ALTER TABLE schedule ADD CONSTRAINTS ssn\_fk foreign key(ssn) references teacher(ssn);

ALTER TABLE schedule ADD CONSTRAINTS room\_number\_fk foreign key(room\_number) references rooms(room\_number);

create table class\_period(

2 period\_number INT,

3 starting\_time TIMESTAMP NOT NULL,

4 ending\_time TIMESTAMP NOT NULL);

ALTER TABLE class\_period ADD CONSTRAINT class\_period\_pk PRIMARY KEY(period\_number);

ALTER TABLE rooms ADD CONSTRAINTS room\_pk PRIMARY KEY(room\_number);

ALTER TABLE schedule ADD CONSTRAINTS period\_number\_fk foreign key(period\_number) references class\_period(period\_number);

-- Insert data into the 'course' table

INSERT INTO course (courseid, coursename, attendence, credits)

VALUES

(1, 'Mathematics', 30, 4),

(2, 'History', 25, 3),

(3, 'Computer Science', 35, 5),

(4, 'Physics', 28, 4),

(5, 'English Literature', 32, 3);

-- Insert data into the 'teacher' table

INSERT INTO teacher (ssn, name, department, skills, yearslysalary)

VALUES

('123-45-6789', 'John Doe', 'Mathematics', 'Algebra', 75000.00),

('987-65-4321', 'Jane Smith', 'History', 'World History', 80000.00),

('111-22-3333', 'Bob Johnson', 'Computer Science', 'Programming', 90000.00),

('444-55-6666', 'Alice Brown', 'Physics', 'Quantum Mechanics', 82000.00),

('777-88-9999', 'Eva White', 'English', 'Literary Analysis', 78000.00);

-- Insert data into the 'rooms' table

INSERT INTO rooms (room\_number, room\_type, capacity)

VALUES

(101, 'Lecture Hall', 100),

(201, 'Lab', 30),

(301, 'Classroom', 50),

(102, 'Conference Room', 20),

(202, 'Small Lab', 15);

INSERT INTO class\_period (period\_number, starting\_time,ending\_time)

VALUES

(1,TO\_TIMESTAMP( '2023-12-25 08:00:00', 'YYYY-MM-DD HH24:MI:SS'),TO\_TIMESTAMP ('2023-12-25 09:30:00', 'YYYY-MM-DD HH24:MI:SS'));

(1,TO\_TIMESTAMP( '2023-12-25 08:00:00', 'YYYY-MM-DD HH24:MI:SS'),TO\_TIMESTAMP ('2023-12-25 09:30:00', 'YYYY-MM-DD HH24:MI:SS'));

INSERT INTO class\_period (period\_number, starting\_time,ending\_time)

VALUES

3 (3,TO\_TIMESTAMP( '2023-12-25 13:00:00', 'YYYY-MM-DD HH24:MI:SS'),TO\_TIMESTAMP ('2023-12-25 14:30:00', 'YYYY-MM-DD HH24:MI:SS'));

INSERT INTO schedule (scheduleId, courseid, ssn, room\_number, period\_number)

VALUES

(1, 1, '123-45-6789', 101, 1),

(2, 2, '987-65-4321', 201, 2),

(3, 3, '111-22-3333', 301, 3),

(4, 4, '444-55-6666', 102, 4),

(5, 5, '777-88-9999', 202, 5);

INSERT INTO class\_period (period\_number, starting\_time,ending\_time)

VALUES

(1,TO\_TIMESTAMP( '2023-12-25 08:00:00', 'YYYY-MM-DD HH24:MI:SS'),TO\_TIMESTAMP ('2023-12-25 09:30:00', 'YYYY-MM-DD HH24:MI:SS'));

SELECT coursename

2 FROM course

3 INNER JOIN schedule

4 ON course.courseid = schedule.courseid

5 INNER JOIN class\_period

6 ON schedule.period\_number = class\_period.period\_number

7 WHERE starting\_time = '25-DEC-23 08.00.00.000000 AM';