

# Homework 2

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CS 5530 Spring 2022

## Part I

Diagram 1

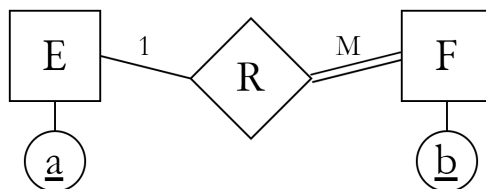
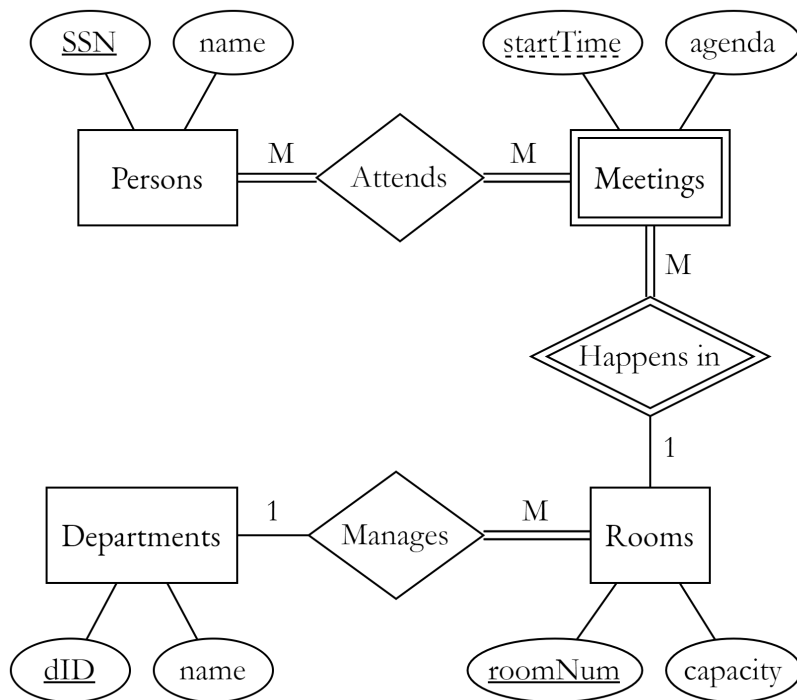
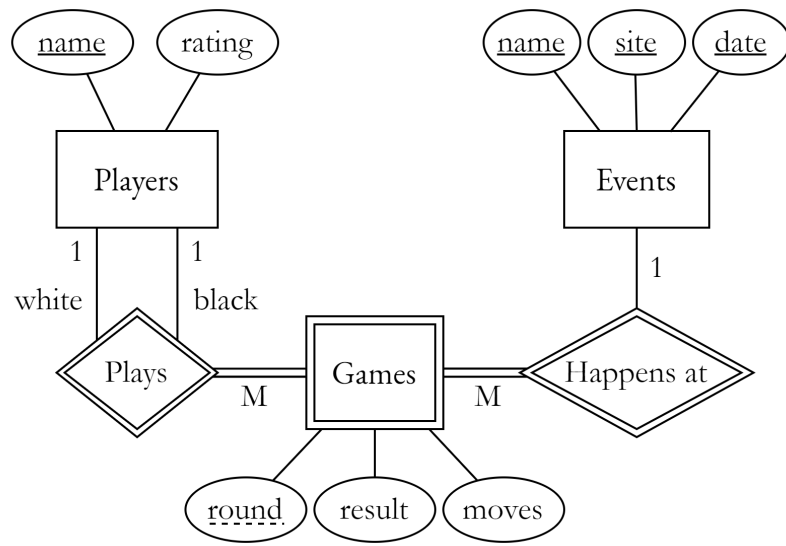


Diagram 2



**Diagram 3**



## Part 2

### Diagram 2

```
CREATE TABLE Persons(  
    ssn INT,  
    name VARCHAR(255),  
    PRIMARY KEY (ssn)  
);  
CREATE TABLE Attends(  
    ssn INT,  
    roomNum INT,  
    startTime INT,  
    PRIMARY KEY (ssn, roomNum, startTime),  
    FOREIGN KEY (ssn) REFERENCES Persons(ssn),  
    FOREIGN KEY (roomNum, startTime) REFERENCES Meetings(roomNum, startTime)  
);  
CREATE TABLE Meetings(  
    roomNum INT,  
    startTime INT,  
    agenda INT,  
    PRIMARY KEY (roomNum, startTime),  
    FOREIGN KEY (roomNum) REFERENCES Rooms(roomNum)  
);  
CREATE TABLE Rooms(  
    roomNum INT,  
    capacity INT,  
    dID INT NOT NULL,  
    PRIMARY KEY (roomNum),  
    FOREIGN KEY (roomNum) REFERENCES Departments(roomNum)  
);  
CREATE TABLE Departments(  
    dID INT,  
    name INT,  
    PRIMARY KEY (dID)  
);
```

### Diagram 3

```
CREATE TABLE Players(  
    name VARCHAR(255),  
    rating FLOAT,  
    PRIMARY KEY (name)  
);  
  
CREATE TABLE Events(  
    name VARCHAR(255),  
    site VARCHAR(255),  
    date DATE,  
    PRIMARY KEY (name, site, date)  
);  
  
CREATE TABLE Games(  
    eventName VARCHAR(255),  
    site VARCHAR(255),  
    date DATE,  
    round INT,  
    whiteName VARCHAR(255),  
    blackName VARCHAR(255),  
    result CHAR(1),  
    moves VARCHAR(1000),  
    PRIMARY KEY (eventName, site, date, round, whiteName, blackName),  
    FOREIGN KEY (eventName, site, date) REFERENCES Events(name, site, date),  
    FOREIGN KEY (whiteName) REFERENCES Players(name),  
    FOREIGN KEY (blackName) REFERENCES Players(name)  
);
```