**Lab 2**

**Part 1 - ER Diagram for Chess Database –**

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**Part 2 - SQL Tables**

CREATE TABLE Players (

playerID BIGINT UNSIGNED NOT NULL,

name VARCHAR(255) NOT NULL,

eloRating INT UNSIGNED NOT NULL,

PRIMARY KEY(playerID)

)

CREATE TABLE Events (

name VARCHAR(255) NOT NULL,

date DATE NOT NULL,

site VARCHAR(255) NOT NULL,

PRIMARY KEY(name, date)

)

CREATE TABLE Games (

gameID BIGINT UNSIGNED NOT NULL,

eventName VARCHAR(255) NOT NULL,

date VARCHAR(255) NOT NULL,

blackPlayer VARCHAR(255) NOT NULL,

whitePlayer VARCHAR(255) NOT NULL,

result VARCHAR(7),

listOfMoves BLOB,

PRIMARY KEY(gameID),

FOREIGN KEY(blackPlayer) REFERENCES Players(playerID)

ON DELETE CASCADE,

ON UPDATE CASCADE,

FOREIGN KEY(whitePlayer) REFERENCES Players(playerID)

ON DELETE CASCADE,

ON UPDATE CASCADE,

FOREIGN KEY(eventName, date) REFFERENCES Events(name, date)

ON DELETE CASCADE,

ON UPDATE CASCADE,

)