Exercise 1: Repetition SQL and relational algebra

Given the following database schema:

Division (name)
Team (tid, name, divname -> Division)
Player (num, tid -> Team, name, weight, height, position)
Match (matchno, date, guest -> Team, home -> Team, guestscore, homescore)
played (num, tid) -> Player, matchno -> Match, pts, field-goal-attempt, field-goal-match

Task 1: DDL
Create the table definitions for the given DB schema!

Task 2: DML
1. Insert into the Division table the following divisions: Atlantic, Central, Midwest and Pacific.
2. Insert into the Match table the match Utah Jazz (UTA) vs. Dallas Mavericks (DAL) from October, 5th 2003 each. The match ended 90 to 85 for Utah.
3. Correct the spelling mistake "Pacifik" in the Division table; the correct word is "Pacific".
4. Remove all data from the table played.

Task 3: Queries
Formulate the following queries in SQL and relational algebra.
1. Select the names of all players of the Sacramento Kings. (Are there different opportunities?)
2. Select all players whose name ends with Davis.
3. Select all players, whose height is at least 2m or whose weight is more than 100kg.
4. Select all possible games/matches of the Pacific Division.
5. Give the percentage of field goals (in relation to the attempts) per player for the whole season in descending order. Select only players with a value >30%.
6. Select name and team of all players without a match (up to now).