CPS 510 Assignment 4: Designing Views/ Simple Quarrie

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1.

```
SELECT Name FROM Players WHERE height > 200;
```

Simple query from ‘Players’ table displaying player names with height over 200 cm

	NAME
1	LeBron James
2	Anthony Davis
3	Dwight Howard
4	Andrew Wiggins
5	Kevon Looney
6	Chris Boucher
7	OG Anunoby
8	Pascal Siakam
9	Kevin Durant
10	Blake Griffin
11	LaMarcus Aldrige

2.

```
SELECT Team_ID, Team_Name, gm FROM Teams WHERE Teams.City_State = 'Toronto';
```

Simple query from ‘Teams’ table displaying Team ID, name of team, and general manager of a team that’s home city is Toronto

	TEAM_ID	TEAM_NAME	GM
1	3	Raptors	Bobby Webster

3.

```
SELECT Player_Stats.Player_ID, Players.Name, Position, Jersy_NO
FROM Player_Stats, Players
WHERE Player_Stats.Player_ID=Players.Player_ID and Player_Stats.Avg_Points > 20;
```

Simple **JOIN** query from ‘Player_Stats’ table displaying player ID, player names, player position, and jersey number for players whose average points is greater than 20 points. This query also uses JOIN with ‘Player_Stats.Player_ID=Players.Player_ID’ which uses ‘player_ID’ as primary key and foreign key to join the ‘Player_Stats’ and ‘Players’ table

	PLAYER_ID	NAME	POSITION	JERSY_NO
1	1	LeBron James	SF	6
2	2	Anthony Davis	PF	3
3	6	Stephen Curry	PG	30
4	16	Kevin Durant	PF	7
5	20	Kyrie Irving	PG	11

4.

```
SELECT Team_Stats.Team_ID, Teams.Team_Name, Losses
FROM Team_Stats, Teams
WHERE Team_Stats.Team_ID=Teams.Team_ID and Team_Stats.Losses >= 2;
```

Simple **JOIN** query from ‘Player_Stats’ table displaying team ID, team name, and number of losses for teams that have 2 or more losses. This query also uses JOIN clause joining ‘Team_Stats’ and ‘Teams’ tables through primary key and foreign key ‘Team_ID’.

	TEAM_ID	TEAM_NAME	LOSSES
1	2	Warriors	3
2	3	Raptors	2
3	4	Nets	2

5.

```
SELECT Stadium_ID, Stadium_Name, Capacity
FROM Stadium WHERE Stadium_City = 'New York'
```

Simple query from ‘Stadium’ table displaying stadium ID, stadium name, and stadium capacity where the stadium is located in the city of New York.

	STADIUM_ID	STADIUM_NAME	CAPA...
1	5	Madison Square Garden	20800

6.

```
SELECT Schedule.Match_ID, Schedule.Match_Name, Stadium.Stadium_Name,
Schedule.DateTime_Schedule
FROM Schedule, Stadium
WHERE Schedule.Stadium_ID = Stadium.Stadium_ID and Team_ID_1 = 2 and Team_ID_2 = 3;
```

Simple **JOIN** query from ‘Schedule’ table displaying match ID, match name, stadium name where match is held, and date of match for Warriors versus Raptors match. ‘Team_ID_1 = 2’ refers to Warriors and Team_ID_2 = 3 refers to Raptors. This query also uses JOIN clause joining ‘Schedule’ and ‘Stadium’ tables through primary key and foreign key ‘Stadium_ID’.

	MATCH_ID	MATCH_NAME	STADIUM_NAME	DATETIME_SCHEDULE
1	6	Warriors vs Raptors	Chase Center	21-09-02

Advanced Queries Using DISTINCT, ORDER BY, GROUP BY, and COUNT

1.

```
SELECT DISTINCT Height FROM Players;
```

This query uses **DISTINCT** statement to display all the distinct heights of players from 'Players' table. Therefore there are 11 different distinct heights out of the 20 players.

	HEIGHT
1	198
2	185
3	211
4	193
5	201
6	206
7	188
8	202
9	190
10	196
11	208

2.

```
SELECT Weight, Name,Player_ID FROM Players ORDER BY Weight DESC;
```

This query uses **ORDER BY** statement to display all player's names, weight and ID from the 'Players' table. The weight of each player is ordered by descending weight (most weight to least).

	WEIGHT	NAME	PLAYER_ID
1	265	Dwight Howard	4
2	253	Anthony Davis	2
3	250	LeBron James	1
4	250	LaMarcus Aldrige	19
5	250	Blake Griffin	18
6	240	Kevin Durant	16
7	232	OG Anunoby	13
8	230	Draymond Green	8
9	230	Pascal Siakam	15
10	222	Kevon Looney	10
11	220	James Harden	17
12	215	Klay Thompson	7
13	200	Chris Boucher	11
14	200	Russel Westbrook	3
15	197	Andrew Wiggins	9
16	197	Fred Vanvleet	12
17	195	Kyrie Irving	20
18	195	Kent Bazemore	5
19	190	Goran Dragic	14
20	185	Stephen Curry	6

3.

```
SELECT COUNT(Assists), Player_ID FROM Player_Stats GROUP BY Player_ID ORDER BY COUNT(Assists) DESC;
```

This query uses **COUNT** statement to display the number of ‘Assists’ values each player has from the ‘Player_Stats’ table. Since each player has only one value for ‘Assists’, the output table shows ‘1’ for each player. **GROUP BY** is also used to group rows that have the same values into summary rows.

	COUNT(ASSISTS)	PLAYER_ID
1	1	1
2	1	19
3	1	11
4	1	13
5	1	2
6	1	14
7	1	20
8	1	4
9	1	5
10	1	8
11	1	17
12	1	3
13	1	7
14	1	18
15	1	9
16	1	10
17	1	12
18	1	15
19	1	16
20	1	6