

COE848 Lab4 Report

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LoL Esports Database

Players Table:

```
.dump
PRAGMA foreign_keys=OFF;
BEGIN TRANSACTION;
CREATE TABLE players(
  playerID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
  name VARCHAR(255) NOT NULL,
  position VARCHAR(255),
  kp DOUBLE PRECISION,
  avgKDA DOUBLE PRECISION,
  avgCSM DOUBLE PRECISION);
INSERT INTO players VALUES(1,'Pyosik','Jungle',70.0,3.5,7.4000000000000003552);
INSERT INTO players VALUES(2,'Faker','Mid',68.900000000000005684,5.0999999999999996447,8.1999999999999992894);
INSERT INTO players VALUES(3,'Rascal','Top',59.600000000000001422,3.0,8.8000000000000007105);
INSERT INTO players VALUES(4,'Jensen','Mid',65.900000000000005682,6.0999999999999996447,8.6999999999999992894);
INSERT INTO players VALUES(5,'TheShy','Top',47.5,2.399999999999999111,7.9000000000000003552);
INSERT INTO players VALUES(6,'Huanfeng','Adc',70.700000000000002842,6.7999999999999998223,10.0);
INSERT INTO players VALUES(7,'LvMao','Support',68.000000000000000001,2.6000000000000000888,1.1000000000000000888);
INSERT INTO players VALUES(8,'SwordArt','Support',63.000000000000000001,2.899999999999999111,1.199999999999999555);
INSERT INTO players VALUES(9,'Revenge','Top',63.200000000000002842,2.6000000000000000888,7.7000000000000001776);
INSERT INTO players VALUES(10,'Iconic','Jungle',58.7999999999997156,2.1000000000000000888,6.79999999999998223);
```

Champions Table:

```
CREATE TABLE champions(
  championID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
  name VARCHAR(255) NOT NULL,
  pickrate DOUBLE PRECISION,
  banrate DOUBLE PRECISION,
  winrate DOUBLE PRECISION);
INSERT INTO champions VALUES(1,'Syndra',40.700000000000002842,23.199999999999929,50.999999999999999);
INSERT INTO champions VALUES(2,'Alistar',39.0,29.89999999999998579,50.999999999999999);
INSERT INTO champions VALUES(3,'Reil',39.0,40.10000000000000142,50.999999999999999);
INSERT INTO champions VALUES(4,'Orianna',20.89999999999998578,18.100000000000001421,50.999999999999999);
INSERT INTO champions VALUES(5,'Gnar',37.89999999999998579,50.29999999999997156,50.999999999999999);
INSERT INTO champions VALUES(6,'Nidalee',32.200000000000002843,20.30000000000000071,50.999999999999999);
INSERT INTO champions VALUES(7,'Samira',32.200000000000002843,23.6999999999999289,50.999999999999999);
INSERT INTO champions VALUES(8,'Olaf',31.100000000000001421,33.29999999999997158,50.999999999999999);
INSERT INTO champions VALUES(9,'Lillia',29.89999999999998579,58.200000000000002842,50.999999999999999);
INSERT INTO champions VALUES(10,'Kaisa',73.400000000000005682,18.100000000000001421,50.999999999999999);
```

Designers Table: There are only 6 designers that exist currently.

```
CREATE TABLE designers(
  designerID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
  name VARCHAR(255) NOT NULL);
INSERT INTO designers VALUES(1,'Steve Feak');
INSERT INTO designers VALUES(2,'Tom Cadwell');
INSERT INTO designers VALUES(3,'Mark Yetter');
INSERT INTO designers VALUES(4,'Christina Norman');
INSERT INTO designers VALUES(5,'David Capurro');
INSERT INTO designers VALUES(6,'Rob Garrett');
```

Teams Table:

```
CREATE TABLE teams(
  teamID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
  name VARCHAR(255) NOT NULL,
  region VARCHAR(255) NOT NULL,
  winrate DOUBLE PRECISION,
  avgGD DOUBLE PRECISION,
  avgDPG DOUBLE PRECISION);
INSERT INTO teams VALUES(1,'DRX','KR',52.60000000000000142,33.420000000000001706,2.080000000000000071);
INSERT INTO teams VALUES(2,'T1','KR',56.79999999999997157,32.570000000000000283,2.37999999999998934);
INSERT INTO teams VALUES(3,'GenG','KR',63.8999999999999858,32.200000000000002843,2.390000000000001243);
INSERT INTO teams VALUES(4,'Team Liquid','NA',70.9999999999999999,30.0899999999999858,2.54999999999998223);
INSERT INTO teams VALUES(5,'Invictus','CN',51.700000000000002841,29.320000000000000285,2.6200000000000001065);
INSERT INTO teams VALUES(6,'Suning','CN',55.600000000000001421,32.270000000000003126,2.3700000000000001065);
INSERT INTO teams VALUES(7,'JD Gaming','CN',66.700000000000002841,31.440000000000001278,2.47999999999999822);
INSERT INTO teams VALUES(8,'TSM','NA',60.0,33.18999999999997726,2.580000000000000071);
INSERT INTO teams VALUES(9,'Golden Guardians','NA',16.6999999999999289,35.0399999999999146,2.040000000000000355);
INSERT INTO teams VALUES(10,'Immortals','NA',34.7999999999997157,31.460000000000000852,1.42999999999999378);
```

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Tournaments Table:

```
CREATE TABLE tournaments(  
tournamentID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,  
splitname VARCHAR(255) NOT NULL,  
region VARCHAR(255),  
prizepool DOUBLE PRECISION,  
numberofgames INTEGER);  
INSERT INTO tournaments VALUES(1,'LEC Spring 2021','EUW',200000.0,90);  
INSERT INTO tournaments VALUES(2,'LPL Spring 2021','CN',650000.0,249);  
INSERT INTO tournaments VALUES(3,'VCS Spring 2021','VN',50000.0,94);  
INSERT INTO tournaments VALUES(4,'LCK Spring 2021','KR',225000.0,177);  
INSERT INTO tournaments VALUES(5,'TCL Spring 2021','TR',20000.0,80);  
INSERT INTO tournaments VALUES(6,'LCS Spring 2021','NA',200000.0,80);  
INSERT INTO tournaments VALUES(7,'LCL Spring 2021','CIS',68000.000000000000000001,40);  
INSERT INTO tournaments VALUES(8,'PCS Spring 2021','PCS',125000.0,72);  
INSERT INTO tournaments VALUES(9,'LJL Spring 2021','JP',91999.9999999999999998,57);  
INSERT INTO tournaments VALUES(10,'LFL Spring 2021','FR',20000.0,90);  
DELETE FROM sqlite_sequence;  
INSERT INTO sqlite_sequence VALUES('players',10);  
INSERT INTO sqlite_sequence VALUES('champions',10);  
INSERT INTO sqlite_sequence VALUES('designers',6);  
INSERT INTO sqlite_sequence VALUES('teams',10);  
INSERT INTO sqlite_sequence VALUES('tournaments',10);  
COMMIT;
```

Queries:

1. Which player has a KDA greater than 4?

```
SELECT * FROM Players
```

```
WHERE avgKDA > 4
```

2. What position has the highest CS per minute (CSM)

```
SELECT position FROM Players
```

```
WHERE MAX(AvgCSM) As MaxCSM FROM Players
```

3. How many junglers are there with over 50% KP?

```
SELECT COUNT(name) AS 50KPJG FROM Players
```

```
WHERE (position = 'Jungler' AND kp > 50)
```

4. What champion has the highest pick rate?

```
SELECT name FROM Champions
```

```
WHERE MAX(pickrate) As MaxPR
```

5. What champion has the highest ban rate?

```
SELECT name FROM Champions  
WHERE MAX(banrate) AS MaxBR
```

6. Which teams have over 2 average dragons per game (DPG)?

```
SELECT name FROM Teams  
WHERE avgDPG > 2
```

7. Which region has the shortest games?

```
SELECT region FROM Teams  
WHERE MIN(avgGD) AS minGD
```

8. Change the name of T1 to SKT T1

```
UPDATE Teams SET name = 'SKT T1'  
WHERE name = 'T1'
```

9. What tournament as the highest prize pool?

```
SELECT splitname FROM Tournaments  
WHERE MAX(prizepool) AS MAXPP
```

10. How many tournaments were held in the KR region?

```
SELECT Count(name) as numKRTourneys FROM Tournaments  
WHERE region = 'KR'
```