**SQL queries**

/\* Query 1. Lista datum och ort för alla matcher som en viss spelare har varit med i. \*/ sophia tror ok

SELECT player.name as Player, match.date as Date, match.location as Location

FROM match

JOIN team\_set

ON match.id = team\_set.match\_id

JOIN player

ON team\_set.player\_id = player.id

WHERE player.id = 6

/\* Query 2. Lista namn och antal träffar (utdelade och mottagna var för sig), antal vinster och antal matcher spelade för alla spelare som en given användare följer. **färdig** \*/ sophia tror ok

Sophias version: (la till två views för att få det att funka hehhe…la viewsen i viewsdockumentet längst ner.)

select fan.name as fan, player.name as player, throw\_count, hit\_count, player\_wins.match\_wins, count(team\_set.set\_nr) as total\_matches

from player

join player\_wins

on player\_wins.player\_id = fan\_player.player\_id

join team\_set

on team\_set.player\_id = player.id

join fan

on fan.id = fan\_player.fan\_id

join fan\_player

on fan\_player.player\_id = player.id

left outer join (select throw\_player\_id, count(throw\_player\_id) as throw\_count from result

group by throw\_player\_id) as throws

on throws.throw\_player\_id = player.id

left outer join (select hit\_player\_id, count(hit\_player\_id) as hit\_count from result

group by hit\_player\_id) as hits

on hits.hit\_player\_id = player.id

where fan\_player.fan\_id = 3

/\* Query 3. Lista namn på de tre lagen som gjort vunnit flest matcher.

**- färdig**\*/

SELECT team.name

FROM team

JOIN team\_set

ON team.id = team\_set.team\_id

JOIN result

ON team\_set.match\_id = result.match\_id AND team\_set.player\_id = player.id

WHERE count(result.throw\_player\_id) = 6

ORDER BY count(result.throw\_player\_id)

LIMIT 3;

sophia tror ok:

select team.name as team, count(match\_id) as wins from winner

join team

on team.id = winner.winner

group by winner

order by wins desc

limit 3;

/\* Query 4. Lista alla matcher som ett lag spelat samt namn på motståndarlaget och ett status med "Vinst", "Förlust" för varje match.\*/

/\* **Fårdig: Den här query måste har View “opponent”.**

**Här tog vi exempel på alla matchers resultat på team1**

\*/

SELECT opponent.Match,opponent.Team,opponent.Opponent, winner.winner,

CASE WHEN (winner.winner=1)

THEN "Vinst"

ELSE "Förlust"

END AS Resultat

FROM opponent

JOIN winner

ON opponent.Match=winner.match\_id

WHERE opponent.Team="The Artful Dodgers"

AND opponent.Opponent !="The Artful Dodgers";

Sophia:: jag gjorde en variant på denna, inga större skillnader:

Jag gjorde en ny view för opponent där id visas istället för namn. Det är så att man ska slippa skriva hela namn i queries och så att man ska slippa ange lagets id på ett ställe och namnet på ett.

create view opponent\_2 as

select distinct team\_set.match\_id as "match", a.id as "team", b.id as "opponent" from team

join team a

on team.id=a.id

join team b

on b.id=playing\_teams.team\_id

join team\_set

on team\_set.team\_id=team.id

join playing\_teams

on b.id=playing\_teams.team\_id and team\_set.match\_id=playing\_teams.match\_id

where team != opponent

Då ser queryn ut såhär istället:

select opponent\_2.match, team.name, team1.name,

case when (winner.winner=opponent\_2.team)

then "vinst"

else "förlust"

end as resultat

from opponent\_2

join team

on team.id = opponent\_2.team

join team team1

on team1.id = opponent\_2.opponent

join winner

on opponent\_2.match=winner.match\_id

where opponent\_2.team="1"

/\* Query 5. Lista namn på alla lag som en viss spelare varit med i och antal träffar spelaren gjort och antal matcher spelaren spelat för varje lag.\*/

/\* Inte färdig \*/

CREATE VIEW "player1\_played" AS SELECT DISTINCT count(match.id) FROM match

JOIN team\_set

ON match.id = team\_set.match\_id

WHERE team\_set.player\_id = 1

CREATE VIEW "player1\_throw" AS SELECT count(result.throw\_player\_id) FROM result

WHERE throw\_player\_id = 1

SELECT team.name, count(result.hit\_player\_id), match.id

FROM team

JOIN team\_set

ON team.id = team\_set.team\_id

JOIN result

ON team\_set.player\_id = result.throw\_player\_id

JOIN match

ON team\_set.match\_id = match.id

WHERE throw\_player\_id = 1

GROUP BY match.id, result.hit\_player\_id, team.name

Sophias lösning:

select matches\_select.player\_id,

team,

throws,

matches\_played

from (select player\_id, team.name as team, count(result.throw\_player\_id) as throws

from team\_set

join result

on team\_set.player\_id = result.throw\_player\_id and team\_set.team\_id = team.id

join team

on team.id = team\_set.team\_id

group by team.id, player\_id) as throws\_select

join (select player\_id, team.name, count(team\_set.team\_id) as matches\_played

from team\_set

join team

on team.id = team\_set.team\_id

group by team.id, player\_id) as matches\_select

on throws\_select.team = matches\_select.name and throws\_select.player\_id = matches\_select.player\_id

where matches\_select.player\_id = 2

/\*Query 6. Lista namn på de tre spelare som varit med och vunnit flest matcher.

FÄRDIG \*/sophia tror ok:

Sophia:

(obs, lägg till alla views från view-dokumentet)

select player.name, match\_wins from player\_wins

join player

on player.id = player\_wins.player\_id

order by match\_wins desc

limit 3

/\*Query 7. Lista namn på alla spelare som spelat match ett visst datum på en viss ort för att kunna lämna det vidare till polis som utreder misstanke om ett brott. FÄRDIG!\*/sophia tror ok:

SELECT player.name, match.date,match.location

FROM player

JOIN team\_set

ON player.id = team\_set.player\_id

JOIN match

ON team\_set.match\_id = match.id

WHERE match.date = "15/08/2019" and match.location = "Uppsala"

/\*Query 8. Lista namn och högsta antal träffar (utdelade), lägsta antal träffar (mottagna) och medelpoäng per match för alla spelare som en given användare följer.\*/

/\* Inte färdig \*/

/\* Hjälp från Jakob \*/

SELECT team\_set.match\_id, team\_set.player\_id

FROM team\_set

WHERE team\_set.player\_id IN (SELECT fan\_player.player\_id FROM fan\_player

WHERE fan\_player.fan\_id = 1)

/\* Totalt antal träffar som spelarna kastar (som fan 1 följer) i matcher\*/

SELECT result.match\_id, count(result.throw\_player\_id), result.throw\_player\_id FROM result

GROUP BY result.match\_id, result.throw\_player\_id

SELECT team\_set.match\_id, team\_set.player\_id, My\_Throw\_Table.Player\_throws

FROM team\_set

JOIN (SELECT result.match\_id, count(result.throw\_player\_id) as Player\_throws, result.throw\_player\_id FROM result

GROUP BY result.match\_id, result.throw\_player\_id) AS My\_Throw\_Table

ON team\_set.player\_id = My\_Throw\_Table.throw\_player\_id AND team\_set.match\_id = My\_Throw\_Table.match\_id

WHERE team\_set.player\_id IN (SELECT fan\_player.player\_id FROM fan\_player

WHERE fan\_player.fan\_id = 1)

/\* Matcher där fan1 spelare blir träffade \*/

SELECT team\_set.match\_id, team\_set.player\_id, My\_Hits\_Table.Player\_hits

FROM team\_set

JOIN (SELECT result.match\_id, (result.hit\_player\_id) AS Player\_hits, result.hit\_player\_id FROM result

GROUP BY result.match\_id, result.hit\_player\_id) AS My\_Hits\_Table

ON team\_set.player\_id = My\_Hits\_Table.hit\_player\_id AND team\_set.match\_id = My\_Hits\_Table.match\_id

WHERE team\_set.player\_id IN (SELECT fan\_player.player\_id FROM fan\_player

WHERE fan\_player.fan\_id = 1)

/\* Lägst antal träffar \*/

SELECT team\_result.match\_id, MIN(throws) as Minimum\_Hits FROM team\_result

JOIN team\_set

ON team\_set.match\_id = team\_result.match\_id

JOIN fan\_player

ON team\_set.player\_id = fan\_player.player\_id

WHERE fan\_player.fan\_id = 1

GROUP BY team\_result.match\_id

/\* Medelvärde \*/

SELECT team\_result.match\_id, avg(throws) as Average\_Hits FROM team\_result

JOIN team\_set

ON team\_set.match\_id = team\_result.match\_id AND team\_set.team\_id

JOIN fan\_player

ON team\_set.player\_id = fan\_player.player\_id

WHERE fan\_player.fan\_id = 1

GROUP BY team\_result.match\_id

/\* Visar 0 om spelaren inte har blivit träffad av den andra \*/

select team\_set.match\_id, team\_set.player\_id, result.throw\_player\_id, result.hit\_player\_id,

CASE WHEN team\_set.player\_id = result.hit\_player\_id THEN "Hit"

ELSE "Not Hit"

END AS Hits

FROM team\_set

JOIN result

ON team\_set.match\_id = result.match\_id

JOIN fan\_player

ON team\_set.player\_id = fan\_player.player\_id

WHERE fan\_player.fan\_id = 1

ORDER BY Hits desc

/\*Baozhens lösning\*/

/\*VIEW “Total\_Hits”, “Hit\_avg” \*/

SELECT Total\_Hits.id,player.name AS player,

hit\_avg.AVG\_hits AS AVG\_hits,

Total\_Hits.Hits AS highest\_hits,

CASE WHEN Total\_Hits.throw\_player NOT IN (SELECT result.hit\_player\_id FROM result

WHERE result.match\_id = Total\_Hits.id)

THEN 0

ELSE 1

END AS Hts

FROM player

JOIN Total\_Hits

ON player.id= Total\_Hits.throw\_player

JOIN hit\_avg

ON player.id=hit\_avg.player

JOIN fan\_player

ON player.id=fan\_player.player\_id

WHERE fan\_player.fan\_id=10

GROUP BY Total\_Hits.throw\_player, Total\_Hits.id

ORDER BY hit\_avg.AVG\_hits DESC;

/\*Query 9. Lista namn på de spelare som vunnit en match i Visby eller Uppsala men aldrig spelat någon match i Linköping.\*/

/\* Denna tror jag är rätt men har inte löst så den utesluter spelade matcher i linköping\*/

select player.name, match.location,team\_result.throws

from team\_set

join player

on player.id = team\_set.player\_id

join team\_result

on team\_result.match\_id = team\_set.match\_id

join match

on team\_result.match\_id = match.id

where team\_result.throws = 6

and match.location = "Visby"

or match.location = "Uppsala"

group by player.name

order by match.location

**Sophias lösning: (View “player\_linkoping” finns i view dokumentet)**

**select player.name as player**

**from team\_set**

**join player**

**on player.id = team\_set.player\_id**

**join winner**

**on winner.winner = team\_set.team\_id**

**join match**

**on team\_set.match\_id = match.id**

**join (select player\_id, case when (player\_id = player\_in\_linkoping) then "L" else "ok" end as status**

**from team\_set**

**left join player\_linkoping**

**on player\_in\_linkoping = player\_id**

**group by player\_id) as not\_linkoping**

**on not\_linkoping.player\_id = team\_set.player\_id**

**where (location = "Visby"**

**or location = "Uppsala")**

**and status = "ok"**

**group by player**

**order by status desc**

**/\*Baozhens lösning**

**Med Sophias view.**

**Osäkert\*/**

**SELECT player.name**

**from player**

**JOIN team\_set**

**ON player.id=team\_set.player\_id**

**JOIN winner**

**ON team\_set.match\_id= winner.winner**

**JOIN match**

**ON team\_set.match\_id=match.id**

**WHERE player.name NOT IN(SELECT player\_in\_linkoping FROM player\_linkoping)**

**AND match.location="Uppsala" or "Visby"**

**GROUP BY player.name;**

/\*Query 10. För en viss spelare visa namnen på de spelare som den någon gång har träffat (med boll) i match och medeltalet för hur många träffar det är per match. Sortera så att högst medelvärde kommer först och sedan fallande.\*/

/\***Färdig**. Med view “Team\_result”\*/

/\* Axels lösning \*/

SELECT match.id as MatchID, p1.name AS Throw\_Player,

p2.name as Hit\_Player, avg(team\_result.throws) as Average\_Throws

FROM match

JOIN team\_result

ON result.match\_id = team\_result.match\_id

JOIN result

ON match.id= result.match\_id

JOIN player p1

ON p1.id=result.throw\_player\_id

JOIN player p2

ON p2.id= result.hit\_player\_id

WHERE result.throw\_player\_id = 1

GROUP BY result.match\_id, result.throw\_player\_id, result.hit\_player\_id

ORDER BY Average\_Throws DESC

/\*Baozhens lösning\*/

SELECT match.id as MatchID, p1.name AS Throw\_Player,

p2.name as Hit\_Player, (CAST(team\_result.throws AS float)/6) as Average\_Throws

FROM match

JOIN team\_result

ON result.match\_id = team\_result.match\_id

JOIN result

ON match.id= result.match\_id

JOIN player p1

ON p1.id=result.throw\_player\_id

JOIN player p2

ON p2.id= result.hit\_player\_id

WHERE result.throw\_player\_id = 43

GROUP BY result.match\_id, result.throw\_player\_id, result.hit\_player\_id

ORDER BY Average\_Throws DESC