**Some Baseball Queries**

* **List (all) teams and total number of games played**

# teams and total games played

select TN, sum(CA)

from

(select HomeTeamName as TN, count(\*) as CA from GAME group by TN

union

select VisitTeamName as TN, count(\*) as CA from GAME group by TN) as T1

group by TN

order by TN;

# **all** teams and total games played - even if they haven’t played

select TeamName, sum(T1.CA)

from TEAM left outer join

(select HomeTeamName as TN, count(\*) as CA from GAME group by TN

union

select VisitTeamName as TN, count(\*) as CA from GAME group by TN) as T1

on T1.TN = TeamName

group by TeamName;

* **List all teams: name, city, number of wins, number of losses**

# teams with # wins, # losses

select T.TeamName, T.City,

ifnull(HW,0) + ifnull(VW,0), ifnull(HL,0) + ifnull(VL,0)

from TEAM T left outer join

((select HomeTeamName, count(\*) as HW

from GAME

    where HTRuns > VTRuns

    group by HomeTeamName) as T1) on T.TeamName = T1.HomeTeamName

    left outer join

((select VisitTeamName, count(\*) as VW

from GAME

    where VTRuns > HTRuns

    group by VisitTeamName) as T2) on T.TeamName = T2.VisitTeamName

    left outer join

((select HomeTeamName, count(\*) as HL

from GAME

    where HTRuns < VTRuns

    group by HomeTeamName) as T3) on T.TeamName = T3.HomeTeamName

    left outer join

((select VisitTeamName, count(\*) as VL

from GAME

    where VTRuns < HTRuns

    group by VisitTeamName) as T4) on T.TeamName = T4.VisitTeamName;

* **List all pitchers: name, team name, # times winning pitcher, # times losing pitcher, # times saving pitcher**

**# pitchers - NO … this counts duplicates**

select \* from PITCHER;

select ID, Name, TeamName,

count(G1.WinningPITCHER\_ID) as WP,

    count(G2.LosingPITCHER\_ID) as LP,

    count(G3.SavingPITCHER\_ID) as SP

from PITCHER PT left outer join USER on PT.PLAYER\_USER\_ID = ID

left outer join PLAYER PL on PT.PLAYER\_USER\_ID = PL.USER\_ID

    left outer join GAME G1 on PT.PLAYER\_USER\_ID = G1.WinningPITCHER\_ID

    left outer join GAME G2 on PT.PLAYER\_USER\_ID = G2.LosingPITCHER\_ID

    left outer join GAME G3 on PT.PLAYER\_USER\_ID = G3.SavingPITCHER\_ID

group by PT.PLAYER\_USER\_ID;

**#pitchers YES ... this works**

select \* from PITCHER;

select U.ID, Name, TeamName, WP, LP, SP

from PITCHER PT left outer join USER U on PT.PLAYER\_USER\_ID = U.ID

left outer join PLAYER PL on PT.PLAYER\_USER\_ID = PL.USER\_ID

    left outer join

(select WinningPITCHER\_ID as WID, count(\*) as WP from GAME

group by WinningPITCHER\_ID) as T1 on U.ID = WID

    left outer join

(select LosingPITCHER\_ID as LID, count(\*) as LP from GAME

group by LosingPITCHER\_ID) as T2 on U.ID = LID

    left outer join

(select SavingPITCHER\_ID as SID, count(\*) as SP from GAME

group by SavingPITCHER\_ID) as T3 on U.ID = SID;

* **List all players (Player Name) which play for the team that has a letter ‘u’ in Team Name.**

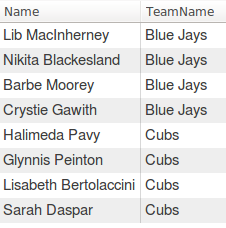
select b.Name, a.TeamName

from (select \* from PLAYER) a

left outer join(select \* from USER) b

on a.USER\_ID = b.ID

where TeamName like '%u%' or TeamName like '%U%';



* **List All Umpires (Player Name and Birth Date) which was part of the games, where Giants played.**

select b.Name, b.DateofBirth

from (select \* from UMPIRE\_GAME

where GAME\_HomeTeamName='Giants' or VisitTeamName='Giants') a

left join

(select \* from USER) b on a.UMPIRE\_USER\_ID = b.ID;



* **Find an average number of Home (team) Runs of games that were before 2019.**

# Home team runs

select avg(HTRuns) as avgRuns from (

select \* from GAME where GameDateTime < '2019-01-01') as T;

# Home runs

select avg(SHR)

from (select HomeTeamName, VisitTeamName, GameDateTime, sum(HomeRuns)as SHR

from PLAYER\_GAME\_SCORE PGS

where GameDateTime < '2019-01-01'

group by HomeTeamName, VisitTeamName, GameDateTime) as HRT;

* **List all the coaches whose team made 3 errors in any game.**

#errors

select USER\_ID, Name

from COACH join USER on USER\_ID = ID

where TEAM\_TeamName in

(select HomeTeamName

from GAME

where HTErrors > 3)

or TEAM\_TeamName in

(select VisitTeamName

from GAME

where VTErrors > 3)

order by USER\_ID;