## DBMS LAB-7

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## 1. Minimal FD Set:

```
1. IPL Database:

Team_name → coach

Team_name → TID

Team_name → captain_ID

TID → coach

TID → Team_name

TID → captain_ID

{Host_team, Guest_team, Date} → Result

PID → Name

PID → Skill_level

PID → Specialty

PID → Team_name

{PID, Date, Injury_name} → Description
```

2. Inter-University Gliding Competition Database:

```
University \rightarrow fees_paid_or_not
University \rightarrow no_of_pilots
PID \rightarrow name
PID \rightarrow experience_level
PID \rightarrow university
callsign \rightarrow capacity
callsign \rightarrow type
```

 $trigraph \rightarrow latitude$  $trigraph \rightarrow longitude$ 

 $\{\text{pilot\_ID, callsign, TID}\} \rightarrow \text{score}$ 

$$\begin{split} \text{TID} &\to \text{start\_time} \\ \text{TID} &\to \text{start\_height} \\ \text{TID} &\to \text{trigraph} \end{split}$$

3. Project Evaluation Database:

```
SID \rightarrow name

SID \rightarrow grp_ID

grp_ID \rightarrow title

grp_ID \rightarrow TA_ID

TA_ID \rightarrow tname

{stage_name, Params} \rightarrow max_marks

{stage_name, Params, SID} \rightarrow student_marks

{stage_name, Params, grp_ID} \rightarrow grp_marks
```

## 2. Projected FD Set:

```
1. IPL Database:
    Team\_name \rightarrow coach
    Team\_name \rightarrow TID
    Team\_name \rightarrow captain\_ID
    TID \rightarrow coach
    \mathrm{TID} \to \mathrm{Team\_name}
    TID \rightarrow captain\_ID
    \{Host\_team, Guest\_team, Date\} \rightarrow Result
    PID \rightarrow Name
    \mathrm{PID} \to \mathrm{skill\_level}
    PID \rightarrow Specialty
    \mathrm{PID} \to \mathrm{Team\_name}
    PID \rightarrow coach
    PID \rightarrow captain\_ID
    \mathrm{PID} \to \mathrm{TID}
    \{PID, Date, Injury\_name\} \rightarrow Description
2. Inter-University Gliding Competition Database:
    University \rightarrow fees_paid_or_not
    University \rightarrow no_of_pilots
    PID \rightarrow name
    PID \rightarrow experience\_level
    PID \rightarrow university
    \mathrm{PID} \rightarrow \mathrm{fees\_paid\_or\_not}
    PID \rightarrow no\_of\_pilots
    callsign \rightarrow capacity
    call sign \rightarrow type
    trigraph \rightarrow latitude
    trigraph \rightarrow longitude
    \{\text{pilot\_ID, callsign, TID}\} \rightarrow \text{score}
    TID \rightarrow start\_time
    \mathrm{TID} \to \mathrm{start\_height}
    TID \rightarrow trigraph
3. Project Evaluation Database:
    \mathrm{SID} \to \mathrm{name}
    SID \rightarrow grp\_ID
    \mathrm{SID} \to \mathrm{title}
    \mathrm{SID} \to \mathrm{TA}\mathrm{JD}
    \mathrm{SID} \rightarrow \mathrm{tname}
    grp\_ID \rightarrow title
    grp\_ID \to TA\_ID
    grp\_ID \rightarrow tname
    TA_{ID} \rightarrow tname
    \{stage\_name, Params\} \rightarrow max\_marks
```

```
 \begin{aligned} &\{\text{stage\_name, Params, SID}\} \rightarrow \text{student\_marks} \\ &\{\text{stage\_name, Params, grp\_ID}\} \rightarrow \text{grp\_marks} \end{aligned}
```

## 3. Determination of Key:

1. IPL Database:

Team : Team\_name or TID

Game: {Host\_name, Guest\_name, date}

Player: PID

Injury Record: {PID, date, Injury\_name}

2. Inter-University Gliding Competition Database:

Team: University

Pilot: PID Glider: callsign Task: TID

Flies: PID, callsign, TID Turning Points: trigraph

3. Project Evaluation Database:

Student: SID Group: grp\_ID TA: TA\_ID

Stage & Params wise Max\_marks: {Stage\_name,Params}

Eval Student\_marks: {stage\_name,Params,SID} Eval Grp\_marks: {Stage\_name,Params,grp\_ID}