

Task-8 :- Normalizing databases using fundamental

al dependens

Aim :- To normalize the employee database. up
BCKF we decompose the schema using functional
decomposises.

Initial relation schema :-

employee (employee ID, Name, department Job-title,
manager - ID, date, salary.

functional dependences :-

* employee - ID \rightarrow Name, department, Job-title

manager - ID, date salary

* department \rightarrow manager - ID

* manager - ID \rightarrow Name

step by step Normalization

#NF (first normal form)

- Remain ~~partial~~ dependences
- However, for KDD, guest dependences not
on.

primary key.

decompositions

\rightarrow employee (employee - ID, Name, department
ID, Job - Title, Hire - date, salary.

- department (department - ID, manager ID, Name

3NF (Third normal form)

name (transitive via)

a department → manager - ID

updated

Employee (Employee - ID, name, department - ID,
job - title, date salary)

department (department - ID, manager - ID)

manager (manager - ID, name)

BCNF :-

- Every determinant must be a candidate key
- All remaining fcs have determinant that are candidate key.

* Employee - ID

* department - ID

* manager - ID

No decomposition is needed.

final BCNF

~~Employee~~ (Employee - ID)

Job - title, Hire, date salary

VEL TECH - CSE	
PERFORMANCE (5)	08
ANALYSIS AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	15
SIGN WITH DATE	

24/11/24

Result :- Thus, the data base was, normalized to BCNF by decomposing manager table functional dependencies.