

Normalization

1. Given a relation R(P, Q, R, S, T) and Functional Dependency set
 $FD = \{ QR \rightarrow PST, S \rightarrow Q \}, ?$

Questions:

1. Find out the candidate keys?
2. Find our prime attributes and non-prime attributes?
3. Whether this table is in 2NF?
4. Find QS^+ .

2. From the following table: R(ABCDEFGF)
Functional dependency: $\{ AB \rightarrow C, B \rightarrow D, D \rightarrow E, A \rightarrow F, F \rightarrow G \}$

- Q1. Find out the candidate key?
- Q2. Find out the prime and non-prime attribute?
- Q3. Whether this table is in 2NF?
- Q4. Find AF^+

3. From the following table and its functional dependency:
R(ABCD) Functional dependency: $\{ A \rightarrow C, B \rightarrow D \}$

- Q1. Find out the candidate key?
- Q2. Find out the prime and non-prime attribute?
- Q3. Whether this table is in 2NF?
- Q4. Find A^+ ?

4. From the following table: R(ABCDEF)
Functional dependency: $\{ A \rightarrow BC, D \rightarrow E, E \rightarrow F \}$

- Q1. Find out the candidate key?
- Q2. Find out the prime and non-prime attribute?
- Q3. Whether this table is in 2NF?
- Q4. Find AF^+

5. From the following table: R(ABCDE)
Functional dependency: $\{ A \rightarrow BC, CD \rightarrow E, B \rightarrow D, E \rightarrow A \}$

- Q1. Find out the candidate key?
- Q2. Find out the prime and non-prime attribute?
- Q3. Whether this table is in 2NF?
- Q4. Find ACD^+ ?