① A and c

② Non-prime attribute

③ $R(A, B, C, D)$

$F = \{A \rightarrow C, B \rightarrow D\}$

$A^+ = \{AC\}$ $AB^+ = \{ABCD\}$ ✓

$B^+ = \{BD\}$

∴ Candidate key is AB

Prime attributes $= \{A, B,\}$ Non prime attributes $= \{C, D\}$

It is in INF already.

For 2NF no partial dependency ✗ (proper subset of
Candidate key will non-prime attribute   no

$A \rightarrow C$, It violates 2NF property

∴ It is in INF

Coloumn should be Unique Same type
No rows may and colums may be duplicated
Contain primary keys