Quiz 4 *(CSE311L.1 – Asif Ahmed Neloy_Summer'20)*

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Time 20 minutes, Marks 10 (You need to answer all questions).

1. **Explain the 3-type of Normalization and their differences using "Department" table.**

to Be in 1NF The Departments Table must have
1. at least one primary key
2. no multivalued attributes
3. all the columns should be of same type
4. the order of the rows does not matter

therefore, the Departments Table is in 1NF as it satisfies all the above conditions.

to Be in 2NF The Departments Table must have
1. to be in 1NF
2. no partial dependency

therefore, the Table is in 2NF as there is no partial dependency and it satisfies all the above conditions

to Be in 3NF The Departments Table must have
1. to be in 3NF
2. no transitive dependency (when a non prime attribute is dependent on another non prime attribute)

therefore, the Table is in 3NF as there is no tranitive dependency and it satisfies the above conditions

End