|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| id | Course\_no | Course\_title | Ins\_Id | Ins\_name | Grade |

id, course no-> course\_title,Ins\_Id, Ins\_name,grade

course\_no->course\_title,Ins\_Id,Ins\_name

Ins\_Id->Ins\_name

This table is in 1NF.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| id | Name | Dept. | Course\_no | Course\_title | Ins\_Id | Ins\_name | Grade |

id, course no-> course\_title,Ins\_Id, Ins\_name,grade

course\_no->course\_title,Ins\_Id,Ins\_name

Ins\_Id->Ins\_name

Id->name,dept.

This table isn’t in 1NF.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| id | Course no | Course\_title | Ins\_Id | Ins\_name | Grade |

|  |  |  |
| --- | --- | --- |
| Id | name | Dept |

The table is in 1NF now.

2NF

Fully Functional Dependency:

Partial Functional Dependency:

Transitive Functional Dependency:

Rifat,Shanto-> rest of the students Full FD

Shanto->jakir, jakia, hani Partial FD

Jakia-> shapna,antora Transitive FD

* **2NF removes all type of partial dependency.**

|  |  |  |  |
| --- | --- | --- | --- |
| Course\_no | Course\_title | Ins\_ID | Ins\_name |

|  |  |  |
| --- | --- | --- |
| Id | Grade | Course\_no |

|  |  |  |
| --- | --- | --- |
| Id | name | Dept |

3NF

* **3NF removes transitive dependency.**

|  |  |  |
| --- | --- | --- |
| Ins\_Id | Ins\_name | Course\_no |

|  |  |
| --- | --- |
| Course\_no | Course\_title |

|  |  |  |
| --- | --- | --- |
| Id | Grade | Course\_no |

|  |  |  |
| --- | --- | --- |
| id | name | Dept |