For 3NF, we need to ensure it has both 2NF and also has no transitive relation. Currently the tables do not have any transitive relations and thus are already in 3NF form.

Here I removed transitive from staff id and convenor by removing convenor from the table.

Removed marks as it can be called by grade and is also transitive.

Primary keys are student id, subject code, staffed and grade

The 3NF forms of the given table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| stud\_id | subj\_code | sem\_ |  | year | staff\_id | grade |
| 1234 | ITM2005 | 1 | | 2015 | 111 | D |
| 1234 | ACS1005 | 2 | | 2015 | 222 | N |
| 9555 | ITM2005 | 1 | | 2015 | 111 | HD |
| 9555 | PRG1001 | 2 | | 2015 | 333 | C |

|  |  |
| --- | --- |
| staff\_id | convenor |
| 111 | Bob Hauser |
| 222 | Jane Collins |
| 333 | Ahmad Singh |

|  |  |
| --- | --- |
| stud\_id | stud\_name |
| 1234 | John Smith |
| 9555 | Peter Nguyen |

|  |  |
| --- | --- |
| mark | grade |
| 83 | D |
| 44 | N |
| 95 | HD |
| 65 | C |

|  |  |
| --- | --- |
| subj\_code | subj\_title |
| ITM2005 | System Architecture |
| ACS1005 | Data Mgmt |
| PRG1001 | Programming I |