Fundamental of Data Management

Task 4.1.1

1NF (First Normalization Form)

Given Table 1st Normal Form

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Stud\_id | Stud\_name | Subj\_code | Subj\_title | Sem | Year | Staff\_id | convenor | Marks | Grade |
| 1234 | John Smith | ITM2005 | System Architecture | 1 | 2015 | 111 | Bob Hauser | 83 | D |
| 1234 | John Smith | ACS1005 | Data Management | 2 | 2015 | 222 | Jane Collins | 44 | N |
| 9555 | Peter Nguyen | ITM2005 | System Architecture | 1 | 2015 | 111 | Bob Hauser | 95 | HD |
| 9555 | Peter Nguyen | PROG1001 | Programming I | 2 | 2015 | 333 | Ahmad Singh | 65 | C |

2nd Normal Form

Student\_table

|  |  |
| --- | --- |
| Student\_ID | Student\_Name |
| 1234 | John Smith |
| 9555 | Peter Nguyen |

Subject\_table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Subject\_Code | Subject\_Title | SEM | Year | Convenor\_ID |
| ITM2005 | System Architecture | 1 | 2015 | 111 |
| ACS1005 | Data Management | 2 | 2015 | 222 |
| PROG1001 | Programming I | 2 | 2015 | 333 |

Convenor\_Table

|  |  |
| --- | --- |
| Convenor\_ID | Convenor\_Name |
| 111 | Bob Hauser |
| 222 | Jane Collins |
| 333 | Ahmad Singh |

Grade\_Table

|  |  |  |  |
| --- | --- | --- | --- |
| Student\_ID | Subject\_ID | Marks | Grade |
| 1234 | ITM2005 | 83 | D |
| 1234 | ACS1005 | 44 | N |
| 9555 | ITM2005 | 95 | HD |
| 9555 | PROG1001 | 65 | C |

Rule to Achieve 2NF form:

1. Remove all Partial Dependencies from the table.