**Normalization**

**Tables after 3NF:-**

**Student table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Id** | Name | Sec | Year | Phone | City | DeptName | Teaching staff\_ID |
| 1 | Ahmed Saad | 11 | 1 | 01036521478 | Tanta |  |  |
| 2 | Mohamed Samy | 5 | 3 | 01278459621 | Alex |  |  |
| 3 | Mahmoud Ahmed | 5 | 3 | 01009685784 | Shebein |  |  |
| 4 | Mohamed | 14 | 3 | 01147852001 | Cairo |  |  |
| 5 | Saad Ahmed | 3 | 4 | 01289654031 | Tanta |  |  |
| 6 | Ramy Gamal | 9 | 2 | 01000957416 | Shebein |  |  |
| 8 | Mahmoud | 6 | 4 | 01008579451 | Shebein |  |  |

**Department table**

|  |  |  |
| --- | --- | --- |
| **DeptName** | Room | DeptHeader |
| GL |  |  |
| IT | 4 new building | Ahmed Hamad |
| IS | Old building | Hatem Mohamed |
| CS | 5 new building | Ashraf Elsisi |
| OR | Old building | Osama |

**Teaching\_staff table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TecStaff\_id | Name | Phone | Job | City | DeptName |
| 6768 | Ahmed Hamad | 0109869056 | Doctor | Shebein | IT |
| 1245 | Ahmed Farag | 01148745962 | Assistant | Tanta | IS |
| 7565 | Arabi Keshk | 0126574849 | Dean | Shebein | Cs |
| 5869 | Mahmoud Sakr | 0117598475 | Assistant | Shebein | Cs |
| 4746 | Nancy Elhefnawy | 0164849587 | Doctor | Alex | OR |

**Subject table**

|  |  |  |  |
| --- | --- | --- | --- |
| Sub\_id | Name | DeptName | TecStaff\_id |
| 702 | Modeling and Simulation | Cs | 6768 |
| 704 | Network | IT | 1245 |
| 746 | Database | IS | 7565 |
| 713 | Software engineering | Cs | 5869 |

**Grade table**

|  |  |  |
| --- | --- | --- |
| Student Id | Sub\_id | grade |
| 1 | 702 | 72 |
| 1 | 704 | 63 |
| 2 | 746 | 75 |
| 3 | 713 | 55 |
| 8 | 746 | 86 |
| 9 | 704 | 92 |
| 7 | 702 | 91 |
| 7 | 713 | 88 |