**Normalization**

1. Identify in which Form below table is with justification:

ISBN 🡪 Title

ISBN 🡪 Publisher

Publisher 🡪 Address

|  |  |  |  |
| --- | --- | --- | --- |
| **ISBN** | **Title** | **Publisher** | **Address** |

**Ans :** The Table is in 2NF as the non-key attribute Address depends upon another non-key attribute Publisher for its existence.

2. Identify in which Form below table is with justification:

Part\_ID 🡪 Description

Part\_ID 🡪 Price

Part\_ID, Comp\_ID 🡪 No

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Part\_Id | Description | Price | Comp\_Id | No |

**Ans :** The Table is in 1NF as the non-key attribute No depends on Part\_ID as well as Comp\_Id for its existence.

1. Normalize below Table till 3 NF

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Student\_Id** | **Student\_Email** | **First name** | **Last name** | **Address** |
| AB123 | mohit@abc.com | Mohit | Kumar | Bilaspur,Chatisgarh,zip:458991 |
| BC345 | rachana@abc.com | Rachana | Patel | Kacch, Gujrat, zip:832212 |
| KY876 | gaurav@abc.com | Gaurav | Patil | Bilaspur,Chatisgarh,zip:458991 |
| FM235 | minal@abc.com | Minal | Pradhan | Trichy, Tamilnadu,zip:645018 |

**Ans :**

|  |  |
| --- | --- |
| **Student\_Id** | **Student\_Email** |
| AB123 | mohit@abc.com |
| BC345 | rachana@abc.com |
| KY876 | gaurav@abc.com |
| FM235 | minal@abc.com |

|  |  |
| --- | --- |
| **Student\_Id** | **Address** |
| AB123 | Bilaspur,Chatisgarh,zip:458991 |
| BC345 | Kacch, Gujrat, zip:832212 |
| KY876 | Bilaspur,Chatisgarh,zip:458991 |
| FM235 | Trichy, Tamilnadu,zip:645018 |

|  |  |  |
| --- | --- | --- |
| **Student\_Id** | **First name** | **Last name** |
| AB123 | Mohit | Kumar |
| BC345 | Rachana | Patel |
| KY876 | Gaurav | Patil |
| FM235 | Minal | Pradhan |