**1NF:**

A Table to be in 1NF it should have atomic data (the data should not be divided further)

The above table should be converted to 1NF

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Player Name** | **P**  **State** | **P No.** | **Player Team** | **Team**  **Coach** | **Game Against** | **Game Date** | **P**  **Runs** |
| Sachin Tendulkar | Maharashtra | 11 | India | Greg Chappel | Pakistan | 12/3/03 | 95 |
| Sachin Tendulkar | Maharashtra | 11 | India | Greg Chappel | Pakistan | 25/3/03 | 22 |
| Sachin Tendulkar | Maharashtra | 11 | India | Greg Chappel | England | 29/3/03 | 88 |
| Adam Gilchrist | Western Australia | 34 | Australia | John Buchanan | S. Africa | 10/3/03 | 42 |
| Adam Gilchrist | Western Australia | 34 | Australia | John Buchanan | S. Africa | 11/3/03 | 61 |
| Adam Gilchrist | Western Australia | 34 | Australia | John Buchanan | New Zealand | 12/3/03 | 62 |

**2NF :**

* It should be in 1NF
* There should be no partial dependencies.

Player Details:

|  |  |  |
| --- | --- | --- |
| **Player Name(PK)** | **Player State** | **Player Number** |
| Sachin Tendulkar | Maharashtra | 11 |
| Adam Gilchrist | Western Australia | 34 |

Team Info:

|  |  |
| --- | --- |
| **Player Team(PK)** | **Team Coach** |
| India | Greg Chappel |
| Australia | John Buchanan |

Match Details

|  |  |  |
| --- | --- | --- |
| **Game Against** | **Game Date** | **Player Runs** |
| Pakistan | 12/3/03 | 95 |
| Pakistan | 25/3/03 | 22 |
| England | 29/3/03 | 88 |
| S. Africa | 10/3/03 | 42 |
| S. Africa | 11/3/03 | 61 |
| New Zealand | 12/3/03 | 62 |

**3NF :**

* It should be in 2NF.
* There should be no transition dependencies.

Player Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Player Name(PK)** | **Player State** | **Player No.** | **Player Team(FK)** |
| Sachin Tendulkar | Maharashtra | 11 | India |
| Adam Gilchrist | Western Australia | 34 | Australia |

Team Info

|  |  |
| --- | --- |
| **Player Team(PK)** | **Team Coach** |
| India | Greg Chappel |
| Australia | John Buchanan |

Match details

|  |  |  |  |
| --- | --- | --- | --- |
| **Player Name(FK)** | **Game Against** | **Game Date** | **Player Runs** |
| Sachin Tendulkar | Pakistan | 12/3/03 | 95 |
| Sachin Tendulkar | Pakistan | 25/3/03 | 22 |
| Sachin Tendulkar | England | 29/3/03 | 88 |
| Adam Gilchrist | S. Africa | 10/3/03 | 42 |
| Adam Gilchrist | S. Africa | 11/3/03 | 61 |
| Adam Gilchrist | New Zealand | 12/3/03 | 62 |