**EXPERIMENT 11**

**AIM:** Study and use of group by, having, order by features of SQL.

**Introduction:**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TABLE | 1NF | 2NF | 3NF | BCNF | FDs | Min. cover | CK | Prime | Non - Prime |
| Band Tag | Yes | Yes | Yes | Yes | Customer\_ID->Tag\_ID | Customer\_ID->Tag\_ID | Customer\_ID |  |  |
| RFID Raw Data | Yes | Yes | Yes | Yes | location\_Spot ->Item\_ID | location\_Spot ->Item\_ID | location\_Spot |  |  |
| Sensors | Yes | Yes | Yes | Yes | sensor\_ID -> location\_Spot | sensor\_ID -> location\_Spot | sensor\_ID |  |  |
| Readers | Yes | Yes | Yes | Yes | location\_Spot ->sensor\_ID | location\_Spot ->sensor\_ID | location\_Spot |  |  |
| Analysis\_Gdata | Yes | Yes | Yes | Yes | G\_ID -> Sensor\_ID | G\_ID -> Sensor\_ID | G\_ID |  |  |
| Analysis\_Mdata | Yes | Yes | Yes | Yes | M\_ID -> Sensor\_ID | M\_ID -> Sensor\_ID | M\_ID |  |  |
| Analysis\_Sdata | Yes | Yes | Yes | Yes | Item\_ID -> Sensor\_ID | Item\_ID -> Sensor\_ID | Item\_D |  |  |
| Customer\_information |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

In the practical scenario the relation “**Band Tag**” has “**location seq**” as a multi-valued attribute, say for example the sequence can be “A3-A7-D4-E2-B7” as well as just simply “A9”. **Assuming it to be in 1NF** and hence going for the other normal forms.