1. First Normal Form (1NF)

The given tables are already in 1NF because they satisfy the criteria:

Each cell contains atomic (indivisible) values.

There is a primary key for identification.

No duplicated rows or columns.

Each column has only one value for each row in the table.

2. Second Normal Form (2NF)

To achieve 2NF, we need to ensure that all non-key attributes are fully functionally dependent on the entire primary key. Let's analyze each table:

category Table:

The catID is the primary key, and catName depends entirely on it.

No partial dependencies exist.

The table is already in 2NF.

tables Table:

The tid is the primary key, and tname depends entirely on it.

No partial dependencies exist.

The table is already in 2NF.

staff Table:

The staffID is the primary key, and all other attributes (sName, sPhone, sRole) depend entirely on it.

No partial dependencies exist.

The table is already in 2NF.

products Table:

The pID is the primary key, and all other attributes (pName, pPrice, CategoryID, pImage) depend entirely on it.

No partial dependencies exist.

The table is already in 2NF.

tblMain Table:

The MainID is the primary key, and all other attributes (aDate, Time, TableName, WaiterName, status, orderType, total, received, change) depend entirely on it.   tblid,waiterid

No partial dependencies exist.

The table is already in 2NF.

tblDetails Table:

The DetailID is the primary key, and all other attributes (MainID, proID, qty, price, amount) depend entirely on it.

No partial dependencies exist.

The table is already in 2NF.

3. **Third Normal Form (3NF)**

To achieve 3NF, we need to eliminate transitive dependencies. Let's analyze each table:

category Table:

No transitive dependencies exist.

The table is already in 3NF.

tables Table:

No transitive dependencies exist.

The table is already in 3NF.

staff Table:

No transitive dependencies exist.

The table is already in 3NF.

products Table:

No transitive dependencies exist.

The table is already in 3NF.

tblMain Table:

No transitive dependencies exist.

The table is already in 3NF.

tblDetails Table:

No transitive dependencies exist.

The table is already in 3NF.

Conclusion

All the given tables are already in 1NF, 2NF, and 3NF. No further normalization is required.

First Normal Form (1NF): The given tables are already in 1NF because they satisfy the criteria:

Each cell contains atomic (indivisible) values.

There is a primary key for identification.

No duplicated rows or columns.

Each column has only one value for each row in the table.

Second Normal Form (2NF): To achieve 2NF, we need to ensure that all non-key attributes are fully functionally dependent on the entire primary key. All the tables are already in 2NF as there are no partial dependencies.

Third Normal Form (3NF): To achieve 3NF, we need to eliminate transitive dependencies. All the tables are already in 3NF as there are no transitive dependencies.

Conclusion: All the given tables are already in 1NF, 2NF, and 3NF. No further normalization is required.