**Database Coding Standards and guidelines :**

1. **Tables** : Pascal Notation that ends with ‘s’.
   1. Example : Users,Employees
   2. Group related table names
      1. Users\_India
      2. Users\_USA
      3. Users\_China
   3. Use Underscore for table name if the table name is made up of multiple words(package\_deliveries,employee\_information,store\_transactions)
   4. Each table name can have “tbl” prefix to indicate environment
      1. tblEmployees (or) tbl\_Employee
      2. tblProducts (or) tbl\_Products
   5. Table Name can also use TITLE\_CASE but avoid blanks,hyphens and other special characters
2. **Column** name must be singular
   1. Use simple descriptive column names.
   2. Avoid short and cryptic names like pkg,usr,emp...etc
   3. Example : UserId,UserName,PhoneNumber
   4. Avoid Spaces while Naming a column name even table allowed it.
   5. Don’t use dots,special characters,spaces
   6. Don’t use Abbreviations for reserved keywords.(user,column,tag...etc)
   7. In VARCHAR data columns , do not default to NULL ; use an empty string instead
   8. Columns with default values should not allow NULL’s.
   9. Do not use TEXT as data type; Use the maximum allowed characters of VARCHAR instead
   10. Store Datetimes as Datetimes rather than unix timestamps.
   11. Use BLOB,LONGBLOB data types if the datatype of the column is unspecific or complex in which it contains internal json like key-value paired fields;While retrieving the that BLOLB Datatype fields you need to parse the data as the data internally stores in some HEX format
3. Each table must have a Primary Key(PK) and must be an integer if possible
   1. In most cases it should be named an IDENTITY column name ID
   2. Avoid multi column primary Keys
4. As much as possible create stored procedures on the same database as the main tables they will be accessing.
5. Use upper case for SQL keywords
   1. SELECT , INSERT , UPDATE , WHERE ,AND , OR ,LIKE ...etc
6. Indent Code to improve readability
7. Use Paranthesis to increase readability
   1. WHERE (color =’red’ AND (size=1 OR size = 2))
8. Always try to use Views rather than tables while querying in Code

**Views :**

1. Views are like virtual table based on the result set of SQL statements.
2. View contains rows and columns , just like real table
3. The fields in a view are fields from one or more real tables in the database
4. The view name should follow the syntax “vw\_Employees”