```
Generate aggregation & change data type
                                                     Append two tables and retrieve distinct rows only
SELECT CAST(AVG(<column name>) AS INT) AS
                                                 SELECT <column names>
                                                 FROM 
<new column name>
FROM ;
                                                 UNTON
                                                 SELECT <column names>
      Retrieve only the first occurrence of a value
                                                 FROM ;
WITH <cte> AS (
  SELECT <column names>,
                                                    Retrieve rows based on conditions from another table
  ROW NUMBER() OVER (PARTITION BY
                                                 SELECT <column 1>, <column 2>
  <column name> ORDER BY <column name>)
                                                 FROM 
                                                 WHERE (<column_2> =
 AS <row number>
  FROM 
                                                         (SELECT MAX (<column 3>)
)
                                                          FROM )
SELECT <column names>
                                                 );
FROM <cte>
WHERE <row number> = 1;
                                                         Pivot a table with 2 columns and 2 rows
                                                 WITH <cte 1> AS (
         Calculate the median of a column
                                                   SELECT <column 1>,
SELECT
                                                     MAX (
                                                       CASE
(
                                                         WHEN <column_2> = 'value_1'
  (SELECT MAX(<column name>)
                                                         THEN <column 1>
   (SELECT TOP 50 PERCENT <column name>
                                                       END)
   FROM  ORDER BY <column name>)
                                                       OVER (PARTITION BY <column 1>
  AS <bottomhalf>)
                                                       ORDER BY <column 2> DESC)
                                                       AS <new column 1>,
  (SELECT MIN(<column name>)
                                                     MAX (
                                                       CASE
  FROM
   (SELECT top 50 percent <column name>
                                                         WHEN <column 2> = 'value 2'
   FROM 
                                                         THEN <column 1>
  ORDER BY <column name> DESC)
                                                       END)
                                                       OVER (PARTITION BY <column 1>
  AS <tophalf>)
) / 2
                                                       ORDER BY <column_2> DESC)
AS <median>;
                                                       AS <new column 2>
                                                   FROM 
       Categorization of distinct column values
                                                 ),
SELECT <column_names>,
                                                 <cte 2> AS (
  CASE
                                                   SELECT ROW NUMBER() OVER
    WHEN <column name> = 'value 01' THEN
                                                     (ORDER BY <column 1>)
1
                                                      AS <index column>, <new column 1>
    WHEN <column name> = 'value 02' THEN
                                                   FROM <cte 1>
2
                                                   WHERE <new column 1> IS NOT NULL
    ELSE 3
                                                 ),
 END <new column name>
                                                 <cte 3> AS (
FROM ;
                                                   SELECT ROW NUMBER() OVER
                                                     (ORDER BY <column 1>)
 Append two tables with the first occurrence of a row only
                                                      AS <index column>, <new column 2>
                                                   FROM <cte 1>
INSERT INTO 
                                                   WHERE <new column 2> IS NOT NULL
SELECT <column names>
FROM  B
                                                 SELECT B.<new column 1>, A.<new column 2>
WHERE NOT EXISTS (
                                                 FROM <cte_3> A
  SELECT 1
                                                 LEFT JOIN
  FROM  A
   WHERE B.<column 1> = A.<column 1>
                                                 <cte 2> B
                                                 ON A.<index column> = B.<index column>
   B.<column 2> = A.<column 2>
);
                                      Legend
                                                            Aggregation SQL Command
                                                 PINK =
Title = Use Case of SQL Statement
                                                 <red> = Column or Table Name
BLUE = Standard SQL Command
```