INSERT Statement in detail

INSERT statement

- The INSERT statement lets you add one or more rows to a table or view in a SQL Server database.
- The statement is one of the primary data modification language (DML) statements available in Transact-SQL, along with UPDATE, MERGE, and DELETE.
- INSERT statement to add data that you specifically define.
- Can add data that you retrieve from other tables or views.
- OUTPUT clause in your INSERT statement to capture the statement's results for auditing or verification purposes.

Basic Insert Statement

- In a basic INSERT statement you must specify the name of the target table and the data values you want to insert into that table.
- INSERT INTO tableName (column1,column2,columns3....column) VALUES (value1,value2,value3...valueN)
- INSERT INTO StaffSales (staffId,fName,Iname) VALUES (100, Kohn', King')
- INSERT SalesStaff1 VALUES (200, 'Michael', 'Blythe'),
 (300, 'Linda', 'Mitchell'),
 (400, 'Jillian', 'Carson'),
 (500, 'Garrett', 'Vargas');

Inserting Specific Column Values

- In many cases, you'll want to insert values into specific columns, but not all columns.
- If you have an IDENTITY column, you might not want to insert a value into that, but instead allow the database engine to generate the next value automatically.
- The INSERT statement supports an additional component that lets you specify which columns should receive values.
- Columns that are not specified are assumed to generate their own values, as is the case with IDENTITY columns, calculated columns, or columns for which a default value has been defined.

Inserting from other tables

- In the previous examples, the VALUES clause includes a set of values that are enclosed in parentheses and separated by commas..
- But you don't always have to explicitly specify the values. You can instead retrieve the values through a SELECT statement or through a stored procedure.
- INSERT tableName1 (value1,value2)
- Select value11, value12 from tableName2 where (condition)

SELECT INTO statement

- The SELECT INTO statement creates a new table and inserts rows from the query into it.
- SELECT select_list INTO destination FROM source [WHERE condition].
- SELECT * INTO marketing.customers FROM sales.customers;