1. Select Top Records

```sql
SELECT TOP (1000) [AddressID],
      [AddressLine1],
      [AddressLine2],
      [City],
      [StateProvince],
      [CountryRegion],
      [PostalCode],
      [rowguid],
      [ModifiedDate]
FROM [AdventureWorksLT2017].[SalesLT].[Address];
```

◆ **Note:** Retrieves the first 1000 rows from the `SalesLT.Address` table. `TOP` is useful when previewing large tables.

---

2. Change Database Context

```sql
USE AdventureWorksLT2017;
```

◆ **Note:** Switches the active database to `AdventureWorksLT2017`. Always set the database before running queries.

---

3. Distinct Values from a Column

```sql
SELECT DISTINCT City FROM [SalesLT].[Address];
```

◆ **Note:** Returns **unique city names** from the Address table.

---

4. Distinct Values from Multiple Columns

```sql
SELECT DISTINCT City, StateProvince FROM [SalesLT].[Address];
```

◆ **Note:** Fetches unique **combinations of City and StateProvince**.

5. Select All Records

```sql
SELECT * FROM [SalesLT].[Address];
```

- ◆ **Note:** Returns all columns and rows. Useful for exploring data.

6. Filtering with LIKE (Pattern Matching)

```sql
SELECT City FROM [SalesLT].[Address]
WHERE City LIKE 'B%';
```

- ◆ **Note:** Finds cities that **start with 'B'**. % means "zero or more characters".

7. Top N with Ordering

```sql
SELECT TOP 5 * FROM [SalesLT].[Address]
ORDER BY AddressID;
```

- ◆ **Note:** Fetches the **first 5 rows ordered by AddressID**.

8. Filtering with AND

```sql
SELECT * FROM [SalesLT].[Address]
WHERE CountryRegion = 'United States' AND PostalCode = 'V7L 4J4';
```

- ◆ **Note:** Returns rows where **both conditions are true**.

9. Filtering with OR

```sql
SELECT * FROM [SalesLT].[Address]
WHERE CountryRegion = 'United States' OR PostalCode = 'V7L 4J4';
```

- **Note:** Returns rows where **at least one condition is true**.

---

10. Filter by Specific Value

```
SELECT * FROM SalesLT.Address
WHERE CountryRegion = 'Canada';
```

- **Note:** Fetches addresses only in **Canada**.

---

11. Filter with Greater Than

```
SELECT * FROM SalesLT.Address
WHERE AddressID > 100;
```

- **Note:** Shows addresses where ID is **greater than 100**.

---

12. Filter with Date Range

```
SELECT * FROM SalesLT.Address
WHERE ModifiedDate BETWEEN '2005-01-01' AND '2005-12-31';
```

- **Note:** Selects rows where the ModifiedDate falls **within the given year**.

---

13. Filter by IN Clause

```
SELECT * FROM SalesLT.Address
WHERE AddressID IN (446,185,454);
```

- **Note:** Returns rows with IDs **matching any value in the list**.

---

14. Filter by NOT IN

```
SELECT * FROM SalesLT.Address
```

```
WHERE AddressID NOT IN (446,185,454,9);
```

- ◆ **Note:** Excludes rows where AddressID is in the list.

---

15. Multiple Conditions with IN

```
SELECT * FROM SalesLT.Address
WHERE StateProvince IN ('Arizona','Quebec','Washington')
ORDER BY StateProvince;
```

- ◆ **Note:** Fetches addresses from selected provinces/states.

---

16. Range Filtering with BETWEEN

```
SELECT * FROM SalesLT.Address
WHERE AddressID BETWEEN 100 AND 200
ORDER BY AddressID;
```

- ◆ **Note:** Selects rows where ID falls **within the specified range**.

---

17. Pattern Matching with LIKE

```
SELECT City FROM SalesLT.Address
WHERE City LIKE 'v%';
```

- ◆ **Note:** Cities starting with **'v'**.

```
SELECT City FROM SalesLT.Address
WHERE City LIKE '%ca%';
```

- ◆ **Note:** Cities containing **'ca'** anywhere.

```
SELECT DISTINCT City FROM SalesLT.Address
WHERE City LIKE 'V__c%';
```

- ◆ **Note:** Cities starting with **'V'**, followed by **2 characters**, then **'c'**.

```
SELECT DISTINCT City FROM SalesLT.Address
WHERE City LIKE 'V[a,b,c]c%';
```

- ◆ **Note:** Pattern match for cities starting with **'Vac', 'Vbc', or 'Vcc'**.

---

18. Complex Pattern

```
SELECT DISTINCT City
FROM [AdventureWorksLT2017].[SalesLT].[Address]
WHERE City LIKE '%O_[s,tst]a%'
ORDER BY City;
```

- ◆ **Note:** Uses wildcards and bracket expressions to filter based on **complex string patterns**.