SELECT statement

■ For selecting individual columns from a table:

SELECT *<f1>* . . . *<fn>* INTO (*<h1>* . . . *<hn>)*
  FROM *<dbtab>* . . .

■ For selecting a single record from a table:

SELECT SINGLE * FROM *<dtab>*
  WHERE *<condition>*.   (full key)

SELECT statement

- For excluding duplicates:

SELECT DISTINCT *<f1>* *<f2>* . . . *<fn>*

INTO (*<g1>* *<g2>* . . . *<gn>*)

FROM *<dbtab>*   . . .

- Aggregate expressions:

SELECT	AVG(*<f1>*) COUNT(DISTINCT *<f1>*) COUNT(*) MAX(*<f1>*) MIN(*<f1>*) SUM(*<f1>*	FROM *<dbtab>* . . . INTO (*<g1>* . . . *<gn>*)

SAP Table

- Two dimensional matrix describing relationship in database system
- Components:
  - Table fields
  - Foreign keys
  - Technical Settings
  - Indexes

Internal Table

- One way to process large quantities of data in ABAP
- Internal table is a dynamic sequential dataset in which all records have the same structure and a key
- The data is taken from a fixed structure, stored line by line in the memory

Internal Table Declaration <No header line>

```
TYPES:
    BEGIN OF T_T001K,
            BWKEY LIKE T001K-BWKEY,
            BUKRS LIKE T001K-BUKRS,
    END OF T_T001K.


DATA:
    IT_T001K  TYPE T_T001K OCCURS 0.
```

Internal Table Declaration <With header line>

```
DATA:
    BEGIN OF IT_T001K OCCURS 0,
            BWKEY LIKE T001K-BWKEY,
            BUKRS LIKE T001K-BUKRS,
    END OF IT_T001K.


•   WITH HEADER LINE
```

SAP --> Internal table

Allows us to get contents of table and put it into internal table

SELECT <field1> <field2>.. <field*n*>

FROM <table>

INTO TABLE <internal table>

WHERE <condition>

LOOP Command

- To perform looping operation in the flow logic
- Four kinds of loops in ABAP:
  - Unconditional loops using the DO statement
  - Conditional loops using the WHILE statement
  - Loops through internal tables and extract datasets using the LOOP statement
  - Loops through datasets from database tables using SELECT statement

DO Command

DO   <n>   TIMES.

statements

ENDDO.

SY-INDEX   Loop index

WHILE Command

WHILE <logical expression>.

statements

ENDWHILE.

SY-INDEX   Loop index

WHILE COUNTER > 0.
      :
      :
    SUBTRACT 1 FROM COUNTER.
ENDWHILE.