

**Appendix  
G**

**DIAGRAMS**

**SYS-ED/  
Computer  
Education  
Techniques, Inc.**

## Relational terminology

|  |  |  |  |
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**Term**

**Approximate meaning**

**relation**

**table**

DBA-50

**tuple**

**record, row in a table**

**attribute**

**field, column in a table**

**domain**

**set of permitted values for a column**

**cardinality**

**number of rows in a table**

**degree**

**number of columns in each row**

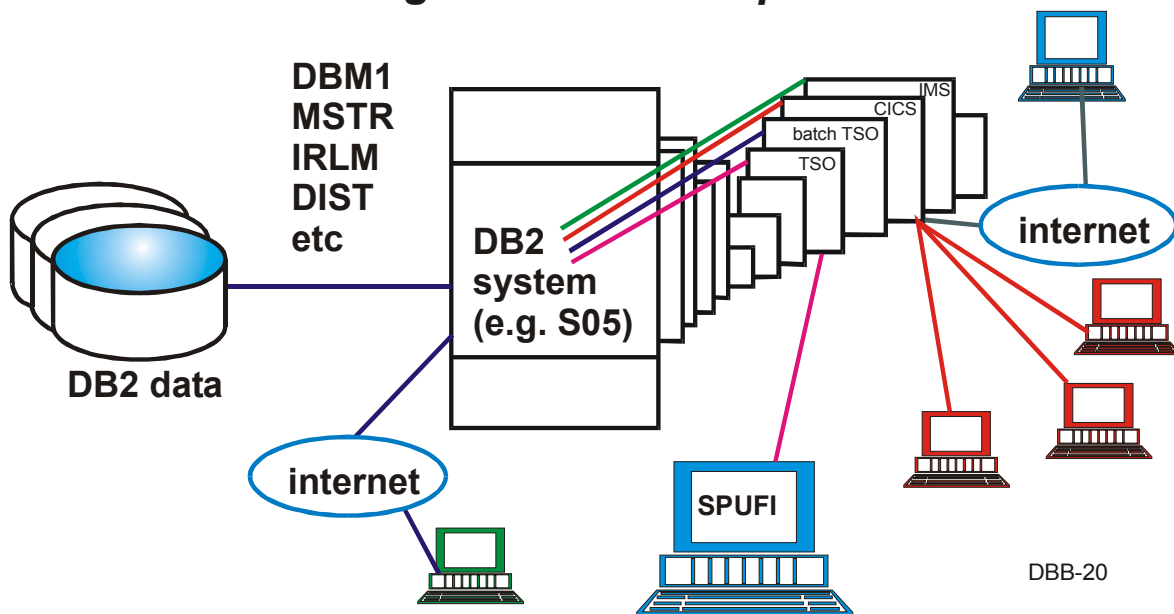
## SQL (Structured Query Language)

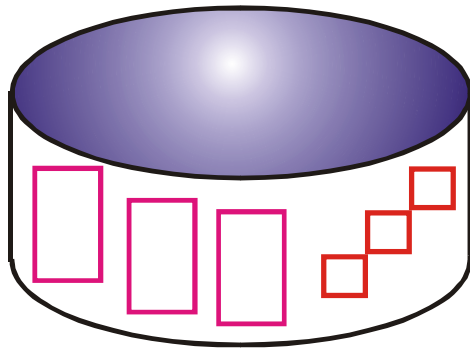
- \* for processing tables
- \* what is required (not how to get it)
- \* independent of physical methods
- \* non-procedural language
- \* runs under TSO, CICS, IMS/DC
- \* accessed from COBOL, PL/1, Assembler, C, etc

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DBB-10

### Accessing DB2 address spaces





## ***Partitioned Tablespace***

For large tables

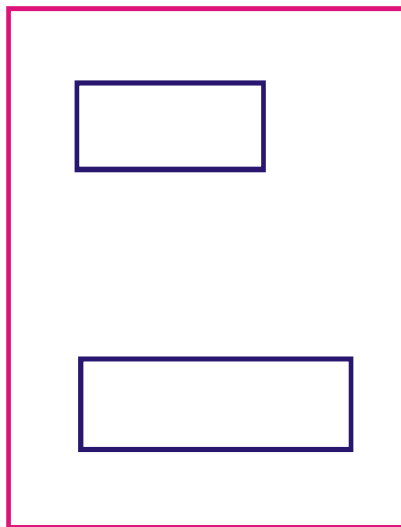
Can be processed separately

Parallel processing option

Index control key ranges

DBB-53

## ***Tables***



\* store data

\* rows and columns (max 750)

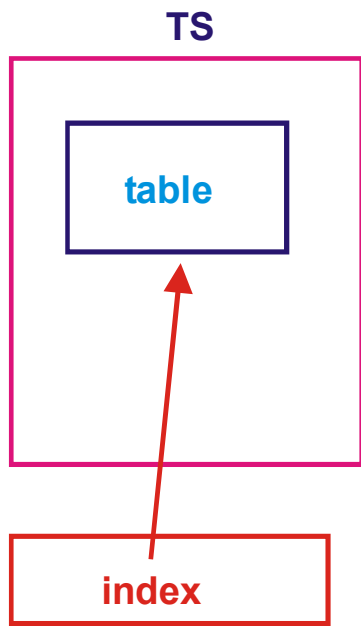
\* manipulated by SQL

\* maximum size 64 GB (V4)  
1024 GB (V5)  
16 TB (V6)

\* space provided by DB2

\* index(es) for improved access

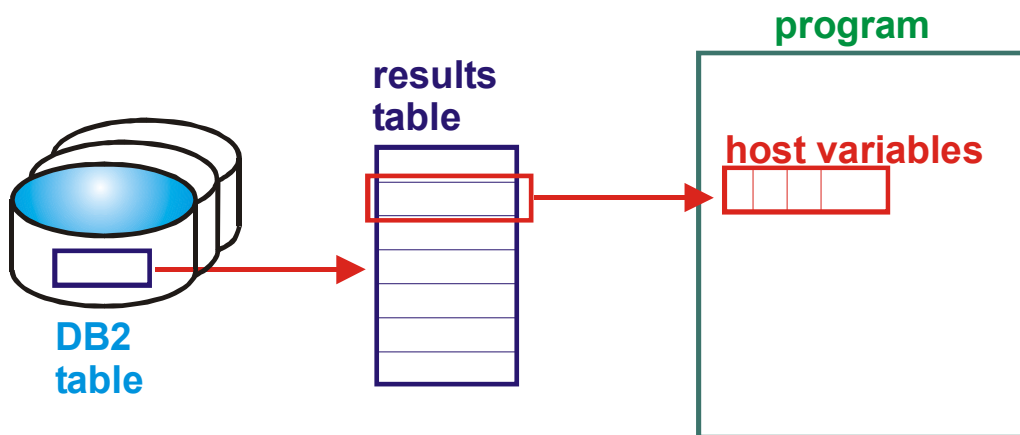
DBB-60



### Index

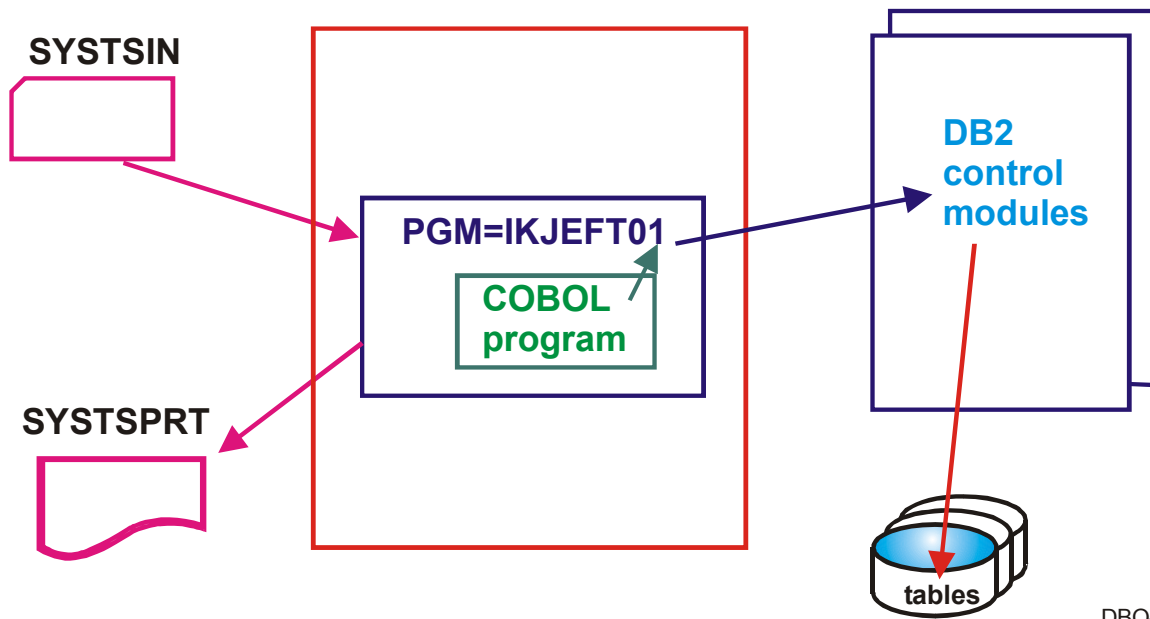
- \* faster access to a column
- \* based on one or more columns
- \* can be unique
- \* ascending or descending sequence
- \* CREATE INDEX ...
- \* reserves own space

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DBR-20

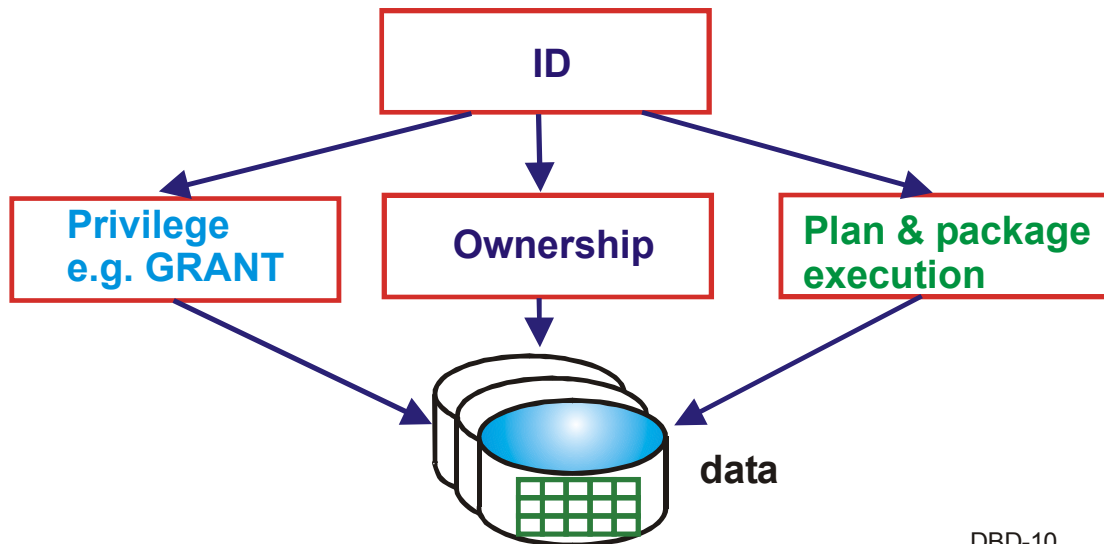
**Host variables contain data from one row**



Running batch DB2 programs

DBQ-10

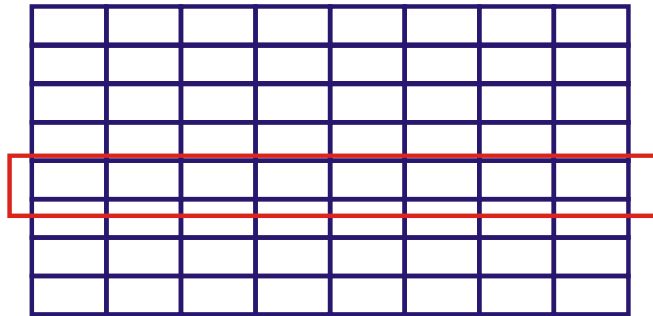
### Accessing DB2 data



DBD-10

## Bind Isolation options

- CS** cursor stability
- RR** repeatable read
- RS** read stability
- UR** unreliable read



DBK-20