

- Each query is selecting a different table within the CAP3 database (customers, agents, products, orders).

The following tables represent the output of the queries shown in the screenshots:

	cid	name	city	discount
	character(4)	text	text	numeric(5,2)
1	c001	Tiptop	Duluth	10.00
2	c002	Tyrell	Dallas	12.00
3	c003	Allied	Dallas	8.50
4	c004	ACME	Duluth	8.00
5	c005	Weyland	Acheron	0.00
6	c006	ACME	Kyoto	0.00

  

	aid	name	city	commission
	character(3)	text	text	numeric(5,2)
1	a01	Smith	New York	6.00
2	a02	Jones	Newark	6.00
3	a03	Perry	Tokyo	7.00
4	a04	Gray	New York	6.00
5	a05	Otasi	Duluth	5.00
6	a06	Smith	Dallas	5.00
7	a08	Bond	London	7.07

  

	pid	name	city	quantity	priceusd
	character(3)	text	text	integer	numeric(10,2)
1	p01	comb	Dallas	111400	0.50
2	p02	brush	Newark	203000	0.50
3	p03	razor	Duluth	150600	1.00
4	p04	pen	Duluth	125300	1.00
5	p05	pencil	Dallas	221400	1.00
6	p06	folder	Dallas	123100	2.00
7	p07	case	Newark	100500	1.00
8	p08	clip	Newark	200600	1.25

  

	ordnum	mon	cid	aid	pid	qty	totalusd
	integer	character(3)	character(4)	character(3)	character(3)	integer	numeric(12,2)
1	1011	jan	c001	a01	p01	1000	450.00
2	1013	jan	c002	a03	p03	1000	880.00
3	1019	jan	c003	a03	p05	1200	1104.00
4	1014	jan	c006	a01	p01	1000	500.00
5	1017	feb	c001	a06	p03	600	540.00
6	1018	feb	c001	a03	p04	600	540.00
7	1019	feb	c001	a02	p02	400	180.00
8	1020	feb	c006	a03	p07	800	800.00
9	1021	feb	c004	a06	p01	1000	460.00
10	1022	mar	c001	a05	p06	400	720.00
11	1023	mar	c001	a04	p05	500	450.00
12	1024	mar	c006	a06	p01	800	400.00
13	1025	apr	c001	a05	p07	800	720.00
14	1026	may	c002	a05	p03	800	740.00

- Primary Key- A super key made primary and uniquely identifies a row in a table.

Candidate Key- A super key with minimal columns. Super Key- A column or set of columns that uniquely identifies every row in a table.

- Data types are different ways of classifying and sorting data in a database. They specify the types of data, so that the data is more meaningful. For example, if you were to create a database to show different countries trade exports, you might have a table called exports. In this table, you would include columns of the different countries, which would be a character data type and cannot be null. Also, you might include the exports from each country, which would also be a character data type and cannot be null. Lastly, you might include the cost of the exports, which would be an integer data type and can be null. Different data types classify data and make each value have more meaning.

4. “First normal form” Rule- Columns intersected with rows have unique and atomic values.

This is important because it eliminates repeating groups in individual tables, creates separate tables for sets of related data, and identifies each tables with a primary key.

“Access rows by content only”/“What not where” Rule- Retrieving data in a database must be based on information within the rows and columns of a table. This is important because it makes things easier to organize, search for, and retrieve data in a database.

“All rows must be unique” Rule- Rows in a database must not duplicate and must be unique. This is important because there should be no duplicating data in a database.