Michael O'Rourke
Lab 2

1.

Output pane

Data Output | Explain | Messages | History

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

Illustration 1: Customers

Output pane

Data Output | Explain | Messages | History

	aid character(3)	name text	city text	percent real
1	a01	Smith	New York	6
2	a02	Jones	Newark	6
3	a03	Brown	Tokyo	7
4	a04	Gray	New York	6
5	a05	Otasi	Duluth	5
6	a06	Smith	Dallas	5
7	a08	Bond	London	7

Illustration 2: Agents

Output pane

Data Output | Explain | Messages | History

	pid character(3)	name text	city text	quantity integer	priceusd 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

Illustration 4: Products

Output pane

Data Output | Explain | Messages | History

	ordno integer	mon character(3)	cid character(4)	aid character(3)	pid character(3)	qty integer	dollars numeric(12,2)
1	1011	jan	c001	a01	p01	1000	450.00
2	1013	jan	c002	a03	p03	1000	880.00
3	1015	jan	c003	a03	p05	1200	1104.00
4	1016	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	600	600.00
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

Illustration 3: Orders

2.
Primary key: a key that uniquely associates a value or name to a piece of information in a data base

Candidate key: functions similarly to a primary key, however it can be duplicated any number of times across a table unlike a primary key

Super key: a key that identifies information in a database that is not useful for identifying individual information in the database

3.

A data type such as money would fall under an integer, double, float, etc; a number data type. A table that would use "money" would be one that tracks what was purchased at a convenience store. This might include the quantity, how often the item was purchased. Money would track the price of a single item, and if the database was directly connected to the cash register it could track how much money was made from that item being purchased. Maybe a drink has become popular and the store needs to order more sooner than expected. The value of money is not null-able because it a tangible asset, it can however be zero.

4.
a. "first normal form" rule:

All the data in the database must be defined and placed into columns
Make sure there is no repeating data
Make sure that the data has primary keys associated to them to uniquely identify each

b. "access rows by content only" rule:

when looking throughout a database search based on the information in the columns to find a result instead of rows or tables because these results are too broad

c. "all rows must be unique" rule:

all rows must have a unique identifier such as a primary key to tell one from another