Lab 2 - Faith Mazzone

1)

Output pane

Data Output | Explain | Messages | History

	pid character(3)	name text	city text	qty integer	priceusd numeric(10,2)
1	p01	Heisenberg compensator	Dallas	111400	0.50
2	p02	universal translator	Newark	203000	0.50
3	p03	Commodore PET	Duluth	150600	1.00
4	p04	LCARS module	Duluth	125300	1.00
5	p05	pencil	Dallas	221400	1.00
6	p06	trapper keeper	Dallas	123100	2.00
7	p07	flux capacitor	Newark	100500	1.00
8	p08	HAL 9000 memory core	Newark	200600	1.25

Data Output | Explain | Messages | History

	aid character(3)	name text	city text	commission numeric(5,2)
1	a01	Smith	New York	5.60
2	a02	Jones	Newark	6.00
3	a03	Perry	Hong Kong	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

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

Output pane

Data Output | Explain | Messages | History

	ordno integer	month character(3)	cid character(4)	aid character(3)	pid character(3)	quantity integer	totalusd numeric(12,2)
1	1011	Jan	c001	a01	p01	1100	495.00
2	1012	Jan	c002	a03	p03	1200	1056.00
3	1015	Jan	c003	a03	p05	1000	920.00
4	1016	Jan	c006	a01	p01	1000	500.00
5	1017	Feb	c001	a06	p03	500	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	457.50
10	1022	Mar	c001	a05	p06	450	810.00
11	1023	Mar	c001	a04	p05	500	450.00
12	1024	Mar	c006	a06	p01	880	400.00
13	1025	Apr	c001	a05	p07	888	799.20
14	1026	May	c002	a05	p03	808	711.04

2)
Explain the distinction among the terms primary key, candidate key, and superkey.

A primary key is used to distinguish each item on a table, usually an ID that can be referenced in other tables. A superkey is a set of fields that can ensure every value on the row will be unique. The candidate key is a minimal superkey, it includes the fewest number of values needed for uniqueness. This can also be the primary key in some cases.

3)
Write a short essay on datatypes. Select a topic for which you might create a table.

Datatypes are fairly self explanatory, they are the types of values that are used. If you were to create a table to keep user-related data for an app subscription, perhaps you would use some of the following: INT(8) for the userID, VARCHAR(28) for the first name, VARCHAR(28) for the last name, VARCHAR(8) for the subscription type (paid, premium, no ads, etc), and DATETIME for the date of joining their subscription. The userID is definitely not nullable, and I would say it is recommended to ensure none of the other values could be null either however I suppose it is still possible.

4)

The first relational rule is ‘First Normal Form’. This is to say that the value in each field must be atomic and logical (if it is ‘divisible’ in any way it violates this). The second rule is ‘what, not where’, which means refer to an actual value rather than a vague position like ‘second row’, as this position can change. The third rule is that ‘all rows must be unique’. This ensures that all the information there is not redundant, as it is wasteful and confusing to have identical rows.