

Chapter 2

1. Match the following types of knowledge with their general category

a.	cognitive skills (know what)	1.	to use an EIS to integrate internal and external data
b.	Advanced skills (know how)	2.	to use a RAID storage device for mission critical data
c.	Systems understanding (know why)	3.	to model data
d.	Motivated creativity (care why)	4.	care about why you use IT to solve a business problem

Answer : a-2, b-3, c-1, d-4

Chapter 3

1.

Draw data models for a restaurant menu, tree, and photograph.

1a.

1b.

1c.

2.

Do the following queries based on the OFFICE table using SQL.

OFFICE						
ROOMID	LENGTH	WIDTH	HEIGHT	RENTPRICE	NUMWINDOW	OCCUPANT

2a.

Who occupies the office with the roomid = 1234?

```
SELECT OCCUPANT FROM OFFICE
WHERE ROOMID = 1234
```

2b.

What is the average rental price for an office?

```
SELECT AVG(RENTPRICE) FROM OFFICE
```

2c.

What is the average rental price for offices with two windows?

```
SELECT AVG(RENTPRICE) FROM OFFICE
WHERE NUMWINDOW = 2
```

2d.

How many offices are occupied by Miller, Inc.?

```
SELECT COUNT(ROOMID) FROM OFFICE
```

```
WHERE OCCUPANT = 'Miller, Inc.'
```

2e.

How large (in square feet) is the office with roomid 2345?

```
SELECT LENGTH*WIDTH FROM OFFICE  
WHERE ROOMID = 2345
```

2f.

What is the average price per square foot for an office with one window?

```
SELECT AVG(PRICE/(LENGTH*WIDTH)) FROM OFFICE  
WHERE NUMWINDOW = 1
```

3.

Find the error(s) in the following SQL to answer the query:

- Find all attributes in the SHR table that have the shrcode of either BS or P

```
Select # from SHR where shrcode = (BS or PT
```

Answer:

- the # should be a *
- the = should be in
- there needs to be single quotes around BS and PT
- there should be a comma instead of the word OR

4.

Find the error(s) in the following SQL to answer the query:

- Find the total share quantity's held for all firms that you have less then 15,000 shares

```
Select Count(*) from shrqty where shrcode >15000
```

Answer :

- count should be sum
- * should be shrqty
- shrqty should be shr
- shrcode should be shrqty
- > should be <

5. Find the error(s) in the following SQL to answer the query:

- Increase the share price by 10% for all share prices that are lower than 5.

```
Modify shr  
  shrprice=shrprice*.1  
  where shrprice =5
```

Answer:

1. Modify should be Update
 2. On the second line the key word SET is missing
 3. .1 should be 1.1
 4. = should be <
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