1. **(2 pts)** How many invoices are there?

```
sqlite> select count(*) from invoice;
count(*)
--------
8
```

(3 pts) List the invoice numbers and the invoice dates.

```
sqlite> SELECT INV_NUMBER, INV_DATE from INVOICE ;
INV_NUMBER  INV_DATE
----------  -----------
1001        16-JAN-2016
1002        16-JAN-2016
1003        16-JAN-2016
1004        17-JAN-2016
1005        17-JAN-2016
1006        17-JAN-2016
1007        17-JAN-2016
1008        17-JAN-2016
```

2. **(2 pts)** How many customers are there?

```
sqlite> select count(*) from customer;
count(*)
--------
10
```

(3 pts) List the customer codes and customer names.

```
sqlite> select cus_code,cus_lname,cus_fname from customer;
CUS_CODE  CUS_LNAME  CUS_FNAME
--------  ---------  ---------
10016     Brown      James
10011     Dunne      Leona
10018     Farriss    Anne
10015     O'Brian    Amy
10013     Olowski    Paul
10014     Orlando    Myron
10010     Ramas      Alfred
10012     Smith      Kathy
10019     Smith      Olette
10017     Williams   George
```

3. **(2 pts)** List vendor numbers and vendor names.

```
sqlite> select v_code,v_name from vendor;
V_CODE  V_NAME
------  ----------------
21225   Bryson, Inc.
21226   SuperLoo, Inc.
21231   D&E Supply
21344   Gomez Bros.
22567   Dome Supply
23119   Randsets Ltd.
24004   Brackman Bros.
24288   ORDVA, Inc.
25443   B&K, Inc.
25501   Damal Supplies
25595   Rubicon Systems
```

(3 pts) Show the vendor count per state.

```
sqlite> select count(v_state) from vendor;
count(v_state)
--------------
11
```

4. **(2 pts)** Based on price, what is the most expensive product?

```
sqlite> select max(p_price) from product;
max(p_price)
------------
256.99
```

(3 pts) How much quantity on hand is available for the most expensive product?

```
sqlite> select max(p_price) as price, p_qoh, p_descript from product;
price   P_QOH  P_DESCRIPT
------  -----  --------------------
256.99  11     Hicut chainsaw, 16 in.
```

5. **(2 pts)** Write a query to count the number of customers with a customer balance over $500.

```
sqlite> select count(cus_code) as cus_count from customer where cus_balance > 500;
cus_count
---------
2
```

(3 pts) List the customer code, customer name and balance amount of these customers.

```
sqlite> select cus_code, cus_lname, cus_fname, cus_balance from customer where cus_balance > 500;
CUS_CODE  CUS_LNAME  CUS_FNAME  CUS_BALANCE
--------  ---------  ---------  -----------
10013     Olowski    Paul       536.75
10017     Williams   George     768.93
```

6. **(7 pts)** Generate a listing of products offered by each Vendor. List vendor name, product code and product name. Sort by vendor name and product code.

```
sqlite> select product.p_code, product.v_code, vendor.v_name from product,vendor where product.v_code = vendor.v_code;
P_CODE    V_CODE  V_NAME
--------  ------  ----------
23109-HB  21225   Bryson, Inc.
SM-18277  21225   Bryson, Inc.
SW-23116  21231   D&E Supply
13-Q2/P2  21344   Gomez Bros.
14-Q1/L3  21344   Gomez Bros.
54778-2T  21344   Gomez Bros.
1546-QQ2  23119   Randsets Ltd.
1558-QW1  23119   Randsets Ltd.
2232/QTY  24288   ORDVA, Inc.
2232/QWE  24288   ORDVA, Inc.
89-WRE-Q  24288   ORDVA, Inc.
11QER/31  25595   Rubicon Systems
2238/QPD  25595   Rubicon Systems
WR3/TT3   25595   Rubicon Systems
```

7. **(7 pts)** Generate a listing of customer purchases, including the subtotals for each of the invoice line numbers; sort output by customer code, invoice number and the line_number.

```
sqlite> select invoice.cus_code, invoice.inv_number, line.line_number, line.line_price from invoice, line where
invoice.inv_number = line.inv_number;
CUS_CODE  INV_NUMBER  LINE_NUMBER  LINE_PRICE
--------  ----------  -----------  ----------
10014     1001        1            14.99
10014     1001        2            9.95
10011     1002        1            4.99
10012     1003        1            38.95
10012     1003        2            39.95
10012     1003        3            14.99
10011     1004        1            4.99
10011     1004        2            9.95
10018     1005        1            5.87
10014     1006        1            6.99
10014     1006        2            109.92
10014     1006        3            9.95
10014     1006        4            256.99
10015     1007        1            14.99
10015     1007        2            4.99
10011     1008        1            5.87
10011     1008        2            119.95
10011     1008        3            9.95
```

8. **(7 pts)** List the balance characteristics of the customers who have made purchases during the current invoice cycle—that is, for the customers who appear in the INVOICE table; sort by customer code.

```
sqlite> select invoice.cus_code, customer.cus_balance from invoice,customer where invoice.cus_code = customer.cus_code
and customer.cus_balance;
CUS_CODE  CUS_BALANCE
--------  -----------
10012     345.86
10018     216.55
```

9. **(7 pts)** Find a listing of customers who did not make purchases during the invoicing period; sort by customer code.

```
sqlite> select cus_code as zero_purchases from customer where cus_code not in (select cus_code from invoice);
zero_purchases
--------------
10016
10013
10010
10019
10017
```

10. **(7 pts)** Create a query to produce a summary of the value of products currently in inventory.

```
sqlite> select (p_qoh*p_price) as value, p_code from product;
value     P_CODE
--------  --------
879.92    11QER/31
479.68    13-Q2/P2
314.82    14-Q1/L3
599.25    1546-QQ2
1011.77   1558-QW1
879.36    2232/QTY
599.22    2232/QWE
467.4     2238/QPD
228.85    2310B-HB
115.2     23114-AA
214.57    54778-2T
2826.89   89-WRE-Q
1103.56   PVC23DRT
1202.28   SM-18277
2002.65   SW-23116
2159.1    WR3/TT3
```