[[click here if you would like to open this page in its own window]](https://docs.google.com/document/d/1Zcbdq5SG_n_vrDy9ZV47vWTGGOclGI5G1vpSt9mmzLQ/edit?usp=sharing)

# BIS 235 SQL HW #1: The DBMS Environment, Setup, Select and Sort

Devise the appropriate SQL queries for each of the requests below. To receive full credit your response must be a single SQL query. Include in your response both the query that you issued and the output that was returned. Be sure to include ONLY your final query and the resultant output. If you include parts of your initial attempts or extraneous output, you may lose points for doing so. Submit your completed assignment to the SQL HW1 Dropbox.

To begin, log into BIS 235 Turnkey LAMP OS and connect to your server either using the PuTTY SSH client (strongly recommended) or the Web shell.

**To receive full credit for the assignment:** Provide BOTH your input (the query you type) AND the output the system provides (what happens after you press enter after your query). Omit any extraneous text, including previous attempts that resulted in errors, etc.   
  
LABEL your questions with the question number and make sure that your question number labeling is accurate! If your answers aren’t labeled accurately, you will NOT receive credit for them. Take the time to make sure your work is neat, clear and easy to read, for your sake and for mine. Thanks.

Note that you can't use any information not explicitly provided in the query itself. (In other words, you can't "look up" any information manually or in general rely on your knowledge of the data contained in the tables.) *Your query should return accurate data no matter how the data in the corresponding table(s) changes in the future.*

You may NOT use PHPMyAdmin for this or any SQL homework assignments.

1. **What version of the MySQL Server are you running?**

**INPUT**

select @@version;

**OUTPUT**

+------------------+

| @@version |

+------------------+

| 5.5.31-0+wheezy1 |

1. **What databases are available on the server?**

**INPUT**

**SHOW DATABASES;**

**OUTPUT**

+--------------------+

| Database |

+--------------------+

| information\_schema |

| BIS235 |

| Fabric |

| employees |

| mysql |

| northwind |

| performance\_schema |

| phpmyadmin |

| sakila |

| test |

+--------------------+

1. **Select the BIS235 database.**

**INPUT**

USE BIS235;

**OUTPUT**

Database changed

1. **What tables are available in the BIS235 database?**

**INPUT**

**SHOW TABLES;**

**OUTPUT**

+------------------+

| Tables\_in\_BIS235 |

+------------------+

| customers |

| orderitems |

| orders |

| productnotes |

| products |

| vendors |

+------------------+

1. **Retrieve the names and data types of the attributes in the “products” table.**

**INPUT**

DESCRIBEproducts**;**

**OUTPUT**

+------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------+--------------+------+-----+---------+-------+

| prod\_id | char(10) | NO | PRI | NULL | |

| vend\_id | int(11) | NO | | NULL | |

| prod\_name | char(255) | NO | | NULL | |

| prod\_price | decimal(8,2) | NO | | NULL | |

| prod\_desc | text | YES | | NULL | |

+------------+--------------+------+-----+---------+-------+

1. **Retrieve the data in all the columns from all the rows in the “vendors” table.**

**INPUT**

SELECT \* FROM vendors;

**OUTPUT**

| vend\_id | vend\_name | vend\_address | vend\_city | vend\_state | vend\_zip | vend\_country |

+---------+----------------+-----------------+-------------+------------+----------+--------------+

| 1001 | Anvils R Us | 123 Main Street | Southfield | MI | 48075 | USA |

| 1002 | LT Supplies | 500 Park Street | Anytown | OH | 44333 | USA |

| 1003 | ACME | 555 High Street | Los Angeles | CA | 90046 | USA |

| 1004 | Furball Inc. | 1000 5th Avenue | New York | NY | 11111 | USA |

| 1005 | Jet Set | 42 Galaxy Road | London | NULL | N16 6PS | England |

| 1006 | Jouets Et Ours | 1 Rue Amusement | Paris | NULL | 45678 | France |

+---------+----------------+-----------------+-------------+------------+----------+--------------+

1. **Retrieve the names of all customers who live in Chicago, IL.**

**INPUT**

SELECT cust\_name, cust\_city, cust\_state

FROM customers

WHERE cust\_city = 'Chicago';

**OUTPUT**

+-----------+-----------+------------+

| cust\_name | cust\_city | cust\_state |

+-----------+-----------+------------+

| E Fudd | Chicago | IL |

+-----------+-----------+------------+

1. **Retrieve the product name of all the products that the vendor named "ACME" sells.   
   For this query you may go ahead and look up ACME's vendor ID in the vendor table and then use it in your query here. (Later on in the course we will learn how to answer this question directly, without doing this sort of manual look-up, but it is fine in this question for the time being.)**

**INPUT**

SELECT prod\_name

FROM products

WHERE vend\_id=1003;

**OUTPUT**

+----------------+

| prod\_name |

+----------------+

| Detonator |

| Bird seed |

| Carrots |

| Safe |

| Sling |

| TNT (1 stick) |

| TNT (5 sticks) |

+----------------+

1. **Retrieve the product name, product ID and price for all of the products that “Anvils R Us” sells. (Again, go ahead and look up “Anvils R Us”’s Vendor ID number and use it in the query).**

**INPUT**

SELECT prod\_name, prod\_id, prod\_price

FROM products

WHERE vend\_id=1001;

**OUTPUT**

+--------------+---------+------------+

| prod\_name | prod\_id | prod\_price |

+--------------+---------+------------+

| .5 ton anvil | ANV01 | 5.99 |

| 1 ton anvil | ANV02 | 9.99 |

| 2 ton anvil | ANV03 | 14.99 |

+--------------+---------+------------+

1. **Retrieve the vendor IDs for all vendors that have products in the products table. Make sure that your query returns each unique vendor ID value only one time.**

**INPUT**

SELECT DISTINCT vend\_id

FROM products;

**OUTPUT**

+---------+

| vend\_id |

+---------+

| 1001 |

| 1003 |

| 1002 |

| 1005 |

+---------+

1. **Retrieve the names and prices of all of the products sold by vendor 1003 ordered by price from lowest to highest**

**INPUT**

SELECT vend\_id, prod\_price

FROM products

ORDER BY prod\_price ASC;

**OUTPUT**

+---------+------------+

| vend\_id | prod\_price |

+---------+------------+

| 1003 | 2.50 |

| 1003 | 2.50 |

| 1002 | 3.42 |

| 1003 | 4.49 |

| 1001 | 5.99 |

| 1002 | 8.99 |

| 1001 | 9.99 |

| 1003 | 10.00 |

| 1003 | 10.00 |

| 1003 | 13.00 |

| 1001 | 14.99 |

| 1005 | 35.00 |

| 1003 | 50.00 |

| 1005 | 55.00 |

+---------+------------+

1. **Retrieve all the information about produ acending order by vend\_id and within vend\_id by price from lowest to highest**

**INPUT**

SELECT vend\_id

FROM products

ORDER BY vend\_id ASC;

**OUTPUT**

+---------+

| vend\_id |

+---------+

| 1001 |

| 1001 |

| 1001 |

| 1002 |

| 1002 |

| 1003 |

| 1003 |

| 1003 |

| 1003 |

| 1003 |

| 1003 |

| 1003 |

| 1005 |

| 1005 |

+---------+