[[click here if you would like to open this page in its own window]](https://docs.google.com/document/d/1aoYiupA2W5pAJzKReia_YrdFlmTx-KG3nPsXDuLvd5s/edit?usp=sharing)

# **SQL HW #5: Aggregate Queries**

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. You must also LABEL your work with the corresponding question number in order to receive full credit.

Where not otherwise specified, you may return all columns in a given query (i.e. you may use “SELECT \* …”)

The ERD for the tables you will be querying in this exercise will be useful for your reference in understanding the relationships between the tables. It is the same as in SQL HW4, so please consult the diagram there.

1. **What is the average cost of all the products in the products table?**

INPUT

SELECT AVG(prod\_price) FROM products;

OUTPUT

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

| AVG(prod\_price) |

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

| 16.133571 |

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

1. **What is the most expensive price in the products table?**

INPUT

SELECT MAX(prod\_price) FROM products;

OUTPUT

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

| MAX(prod\_price) |

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

| 55.00 |

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

1. **What is the average cost of the items in order number 20005?**

INPUT

SELECT AVG(item\_price) FROM orderitems

WHERE order\_num = 20005;

OUTPUT

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

| AVG(item\_price) |

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

| 8.995000 |

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

1. **What is the total quantity of item units ordered across all items ordered in order number 20005?**

INPUT

SELECT SUM(quantity) FROM orderitems

WHERE order\_num = 20005;

OUTPUT

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

| SUM(quantity) |

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

| 19 |

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

1. What is the average price of the products in the products table that cost over $10.00?

INPUT

SELECT AVG(prod\_price) FROM products

WHERE prod\_price > 10;

OUTPUT

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

| AVG(prod\_price) |

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

| 33.598000 |

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

1. Provide a count of the number of products each vendor supplies and the average price of the products provided per vendor for vendors located in the USA, order your output from the vendor with the most products to the vendor with the least products.

INPUT

SELECT vend\_name,

COUNT(prod\_name) AS 'total\_product',

AVG(prod\_price) as 'avgerage\_price'

FROM products, vendors

WHERE products.vend\_id = vendors.vend\_id

AND vend\_country = 'USA'

GROUP BY vend\_name ORDER BY total\_product DESC;

OUTPUT

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

| vend\_name | total\_product | avgerage\_price |

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

| ACME | 7 | 13.212857 |

| Anvils R Us | 3 | 10.323333 |

| LT Supplies | 2 | 6.205000 |

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

1. BONUS (Quite difficult): Which vendor or vendors (because the top seller may be a tie between products sold by different vendors) sells the item that is ordered most often?