



# Lab 149: Selecting Data from a Database

Link: <https://awsrestart.instructure.com/courses/1632/modules/items/886879>

## Lab Overview

### Scenario

Inventory management is one of the tasks that you have been asked to support with your database from your client, the Canal House Books store. You have been provided an inventory report that can be added to the SQL database. Using this report, identify items that need to be ordered or removed from stock.

### Objectives

In this lab, you will:

- Import the inventory report table
- Find items that are out of stock to reorder them from the inventory table
- Locate items that are not selling to remove them from the inventory table

## Exercise 1: Import Inventory CSV

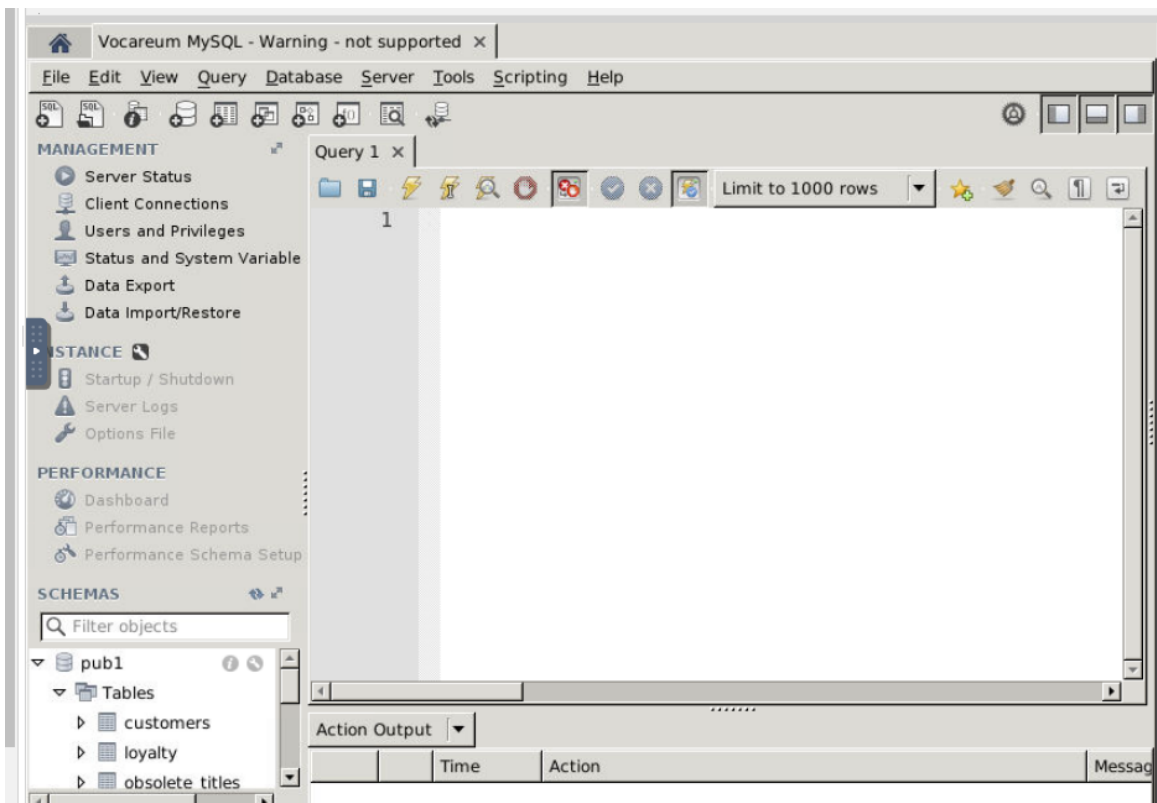
The store has kept track of books sold over the past few years and wants to use this to inform inventory business decisions quickly. Import the csv file into a new table in your database, **pub1**.

### TODO

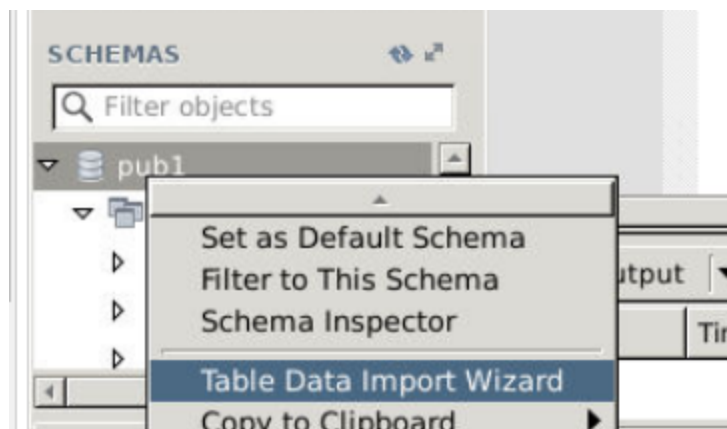
Insert the inventory report from **work/InventoryReport.csv** into the database using the table name **inventory**.

### Steps

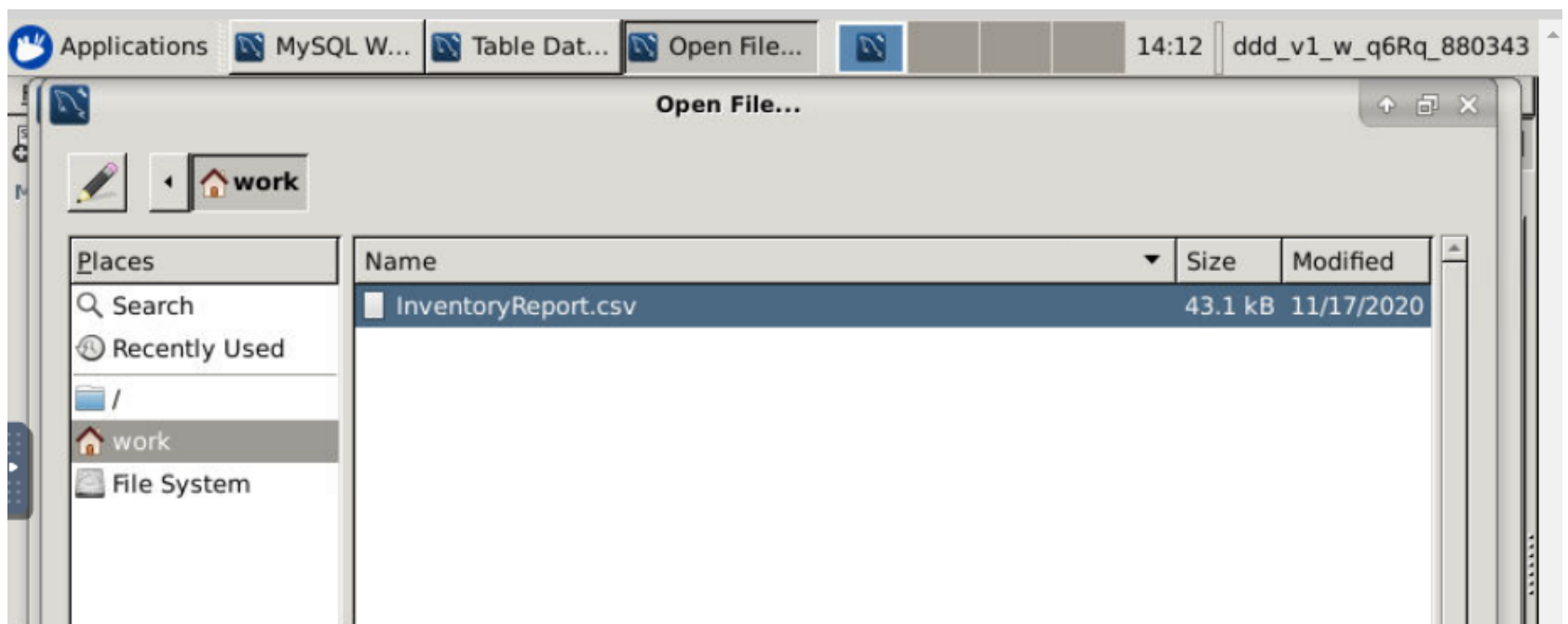
1. Ensure that you are logged into the workspace and have MySQL Workbench open and are connected to the **pub1** database.



2. Right click the **Tables** tab in **pub1** and select **Table Data Import Wizard**.



- Click **Browse** and browse to the path to select your **work/InventoryReport.csv** file to import. Click **Open**; then click **Next**.



- Next to **Create new table**, ensure **pub1** is selected. Type **inventory** into the **name** field and click **Next**.



- In the Configure Import Settings portion of the import wizard, verify that the source columns match up to the appropriate destination columns and click **Next**.

Vocareum MySQL - Warning - not supported

Table Data Import

Configure Import Settings

Detected file format: csv

Encoding: utf-8

Columns:

<input checked="" type="checkbox"/> Source Column	Field Type
<input checked="" type="checkbox"/> partnum	int
<input checked="" type="checkbox"/> bktitle	text
<input checked="" type="checkbox"/> slprice	double
<input checked="" type="checkbox"/> qty	int

partnum	bktitle	slprice	qty	sold
35766	Can...	64.81	27	5107
38789	Terr...	36.23	3...	7690
30053	A L'...	32.8	2...	2988

< Back

Next >

Cancel

6. Click **Next** to execute the import of the csv file. Click **Next** and **Finish**.

Vocareum MySQL - Warning - not supported

Table Data Import

Import Results

File /mnt/vocwork3/ddd\_v1\_w\_q6Rq\_880343/asn1516947\_179/asn1516948\_1/work/InventoryReport.csv was importe

Table pub1.InventoryReport was created

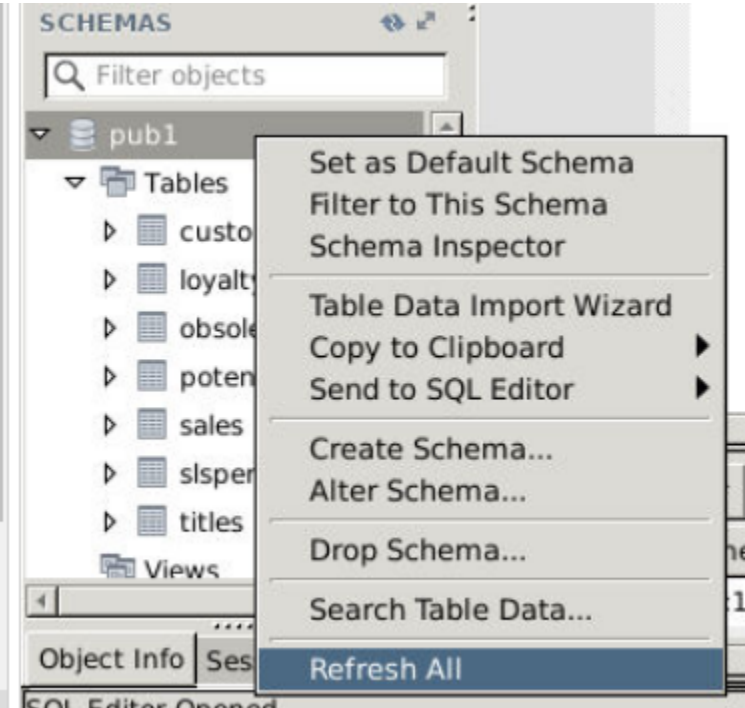
1000 records imported

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Finish

Cancel

7. In the Schemas pane, right-click and select **Refresh All** to populate the **inventory** table.



## Exercise 2: Select Books for Reordering

The manager of the store has asked that you create a query that will be able to identify which books have a low quantity. Any book that has less than 5 copies remaining is in need of ordering. Create a query the manager can use to quickly identify all books that need to be ordered based on these criteria. Sort the results by the most sold product being at the top.

### TODO

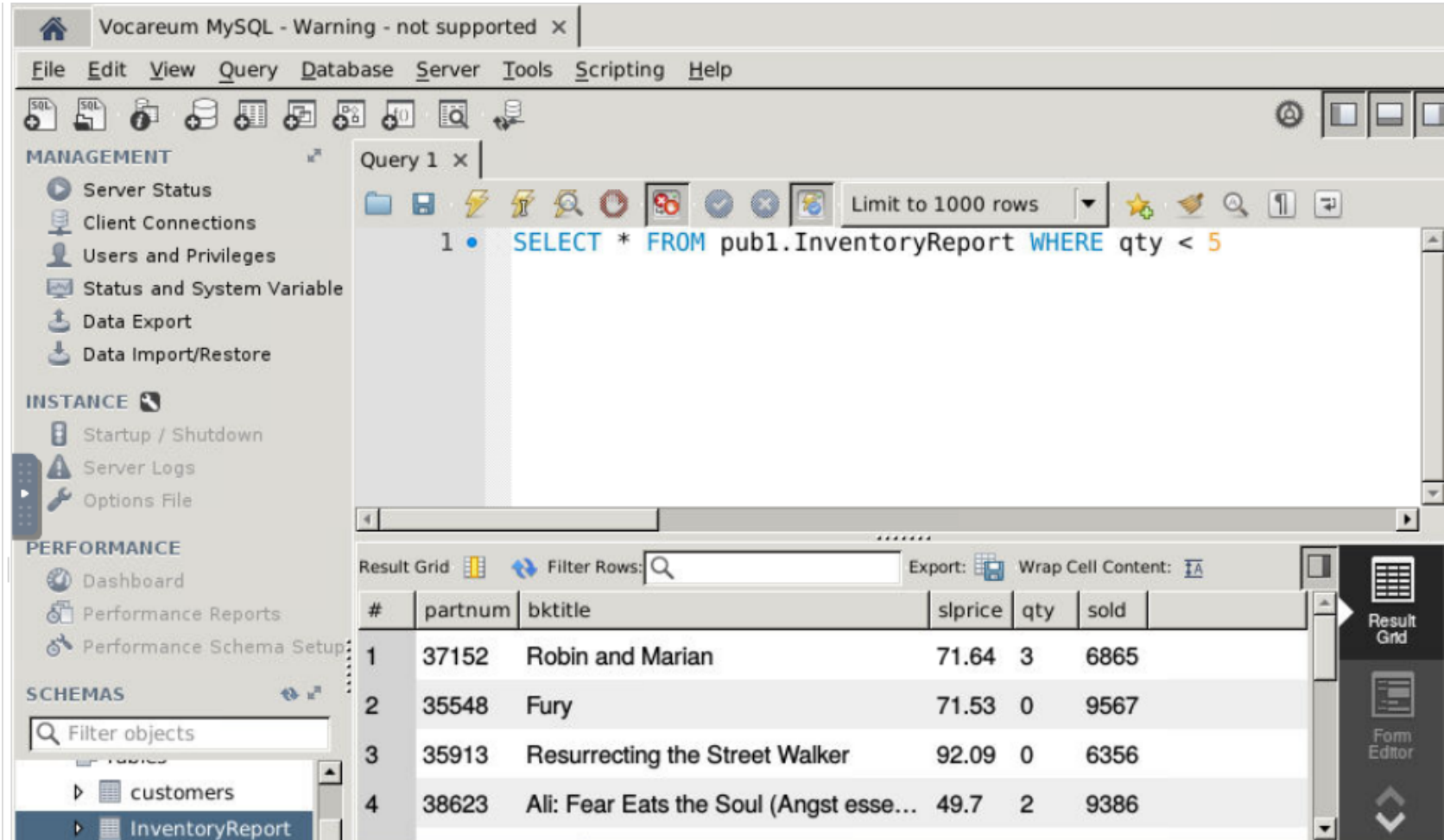
Using the **inventory** table, create a **SELECT** query to identify all books that have fewer than five items remaining in the inventory sorted by amount sold in descending order.

### Steps

1. In Workbench, click the **Query** tab in the main view.
2. Enter the following query to look for all books that have a quantity fewer than 5

```
SELECT * FROM pub1.inventory WHERE qty < 5
```

3. Click the execute lightning bolt to execute the query.



| Yo me olvide de cambiar InventoryReport por inventory :(

## Example view

The screenshot shows a database management interface. On the left, a 'SCHEMAS' pane lists databases like 'pub1' and 'sys'. Under 'pub1', the 'inventory' table is selected. The main area displays a query: `SELECT * FROM pub1.inventory WHERE qty < 5;`. Below the query, a 'Result Grid' shows 13 rows of data. The columns are: #, partnum, bktitle, slprice, qty, and sold. The data lists various books with their part numbers, titles, prices, and quantities sold.

#	partnum	bktitle	slprice	qty	sold
1	37152	Robin and Marian	71.64	3	6865
2	35548	Fury	71.53	0	9567
3	35913	Resurrecting the Street Walker	92.09	0	6356
4	38623	Ali: Fear Eats the Soul (Angst esse...	49.7	2	9386
5	31882	Conversations with Other Women	64.81	0	5129
6	34878	Real McCoy, The	60.51	3	3554
7	35878	Scorching Winds (Garm Hava) (Ga...	71.15	3	6351
8	36894	Me and Earl and the Dying Girl	76.87	4	1578
9	38090	Gentlemen	32.81	3	7888
10	35968	School of Rock	56.12	2	8232
11	38586	Song of the Bloodred Flower (Laul...	87.82	1	7907
12	36156	Conversations with My Gardener (...)	32.09	0	3020
13	30081	Grease	97.19	4	2378

## Exercise 3: Select Low-Selling Books

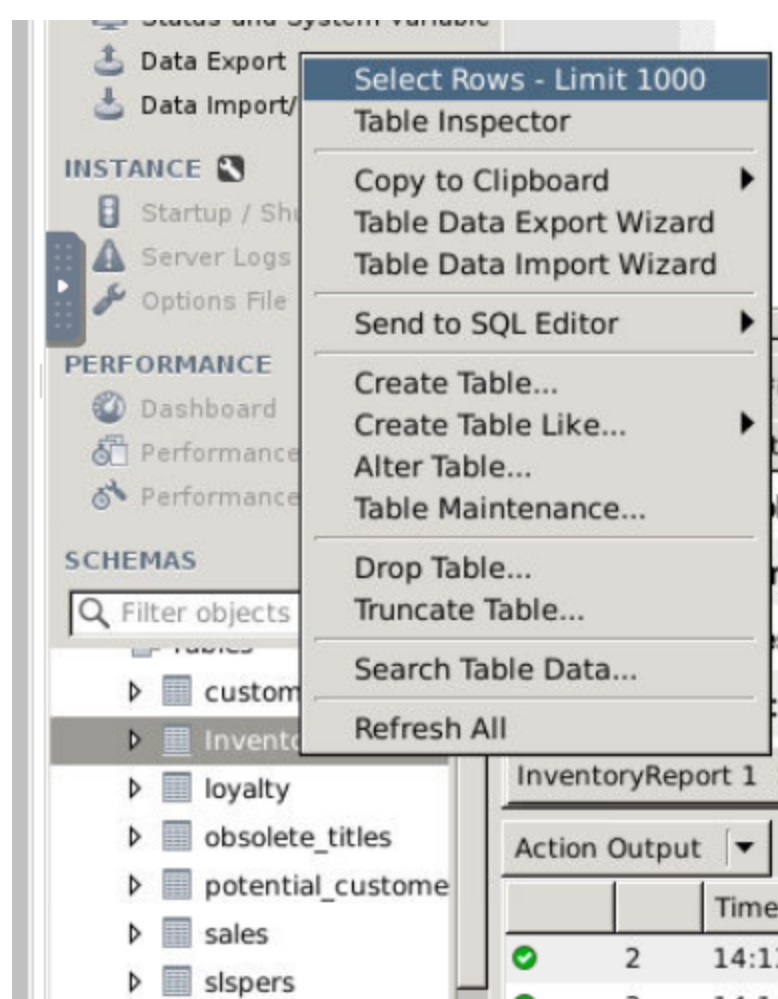
Anticipating additional requirements from the customer can sometimes be a good thing and save you some work later on down the line. In this case, you have anticipated that the manager will probably want to know what items have sold the least. Use 100, 200, and 500 thresholds to create a set of queries to inform the manager.

### TODO

Create three different **SELECT** queries to identify books that have sold less than 100, 200, and 500.

### Steps

1. From the **pub1** database, select the **inventory** table.
2. Right click on the **inventory** table and select the **Select rows – Limit 1000** option.





3. Delete the previous query and type the following line to only include books that have sold fewer than 100 copies.

```
SELECT * from pub1.inventory WHERE sold < 100;
```

Query 1 x InventoryReport x

Limit to 1000 rows

1 • SELECT \* FROM pub1.InventoryReport WHERE sold < 100

Result Grid

Filter Rows: Export: Wrap Cell Content:

#	partnum	bktitle	slprice	qty	sold
1	36645	Supergirl	51.39	482	54
2	30185	Most Likely to Succeed	67.27	294	90
3	37097	Greening of Whitney Brown, The	35.66	308	99
4	30706	Kissing Jessica Stein	94.19	441	67
5	39538	Top of the Food Chain (a.k.a. Invas...	85.44	211	35
6	30627	You Only Live Once	91.2	402	42
7	34485	Bonheur, Le	94.36	245	55
8	32066	Lemony Snicket's A Series of Unfor...	67.42	228	2
9	30239	Merry War, A	84.2	500	0

Result Grid  
Form Editor  
Field Types  
Query Stats

4. Click the lightning bolt to execute the query.

SCHEMAS

Filter objects

pub1

Tables

customers

inventory

loyalty

obsolete\_titles

potential\_customer

sales

slspers

titles

Views

Stored Procedures

Functions

sys

Limit to 1000 rows

1 • SELECT \* FROM pub1.inventory WHERE sold < 100;

Result Grid

Filter Rows: Export: Wrap Cell Content:

#	partnum	bktitle	slprice	qty	sold
1	36645	Supergirl	51.39	482	54
2	30185	Most Likely to Succeed	67.27	294	90
3	37097	Greening of Whitney Brown, The	35.66	308	99
4	30706	Kissing Jessica Stein	94.19	441	67
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9	30239	Merry War, A	84.2	500	0

5. Create two additional queries for 200 and 500 copies below your first query.

Click the lightning bolt with the cursor, the one in the center, to execute the queries individually based on your cursor location.

>200 copies



