Navneet Kaur
Cambrian ID: A00218574
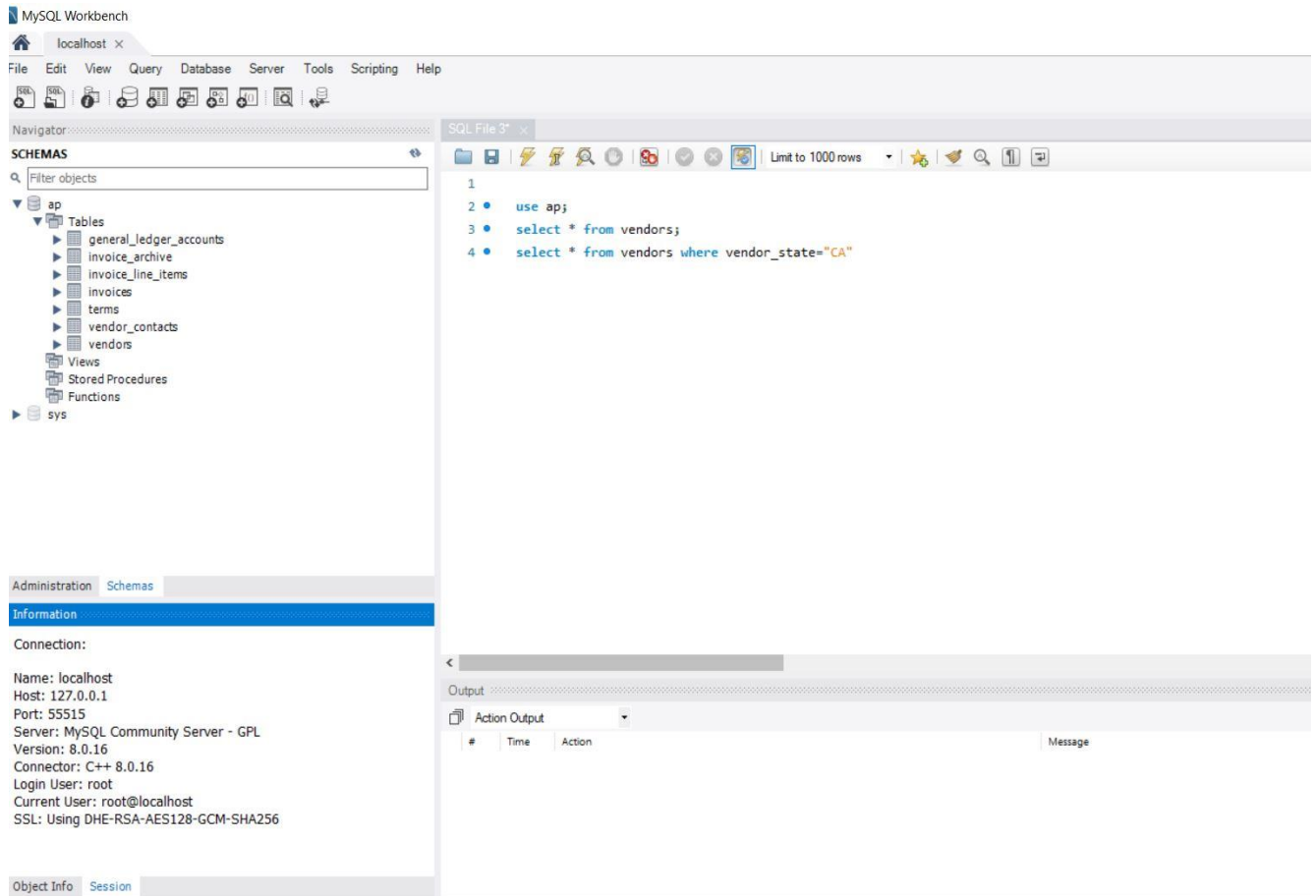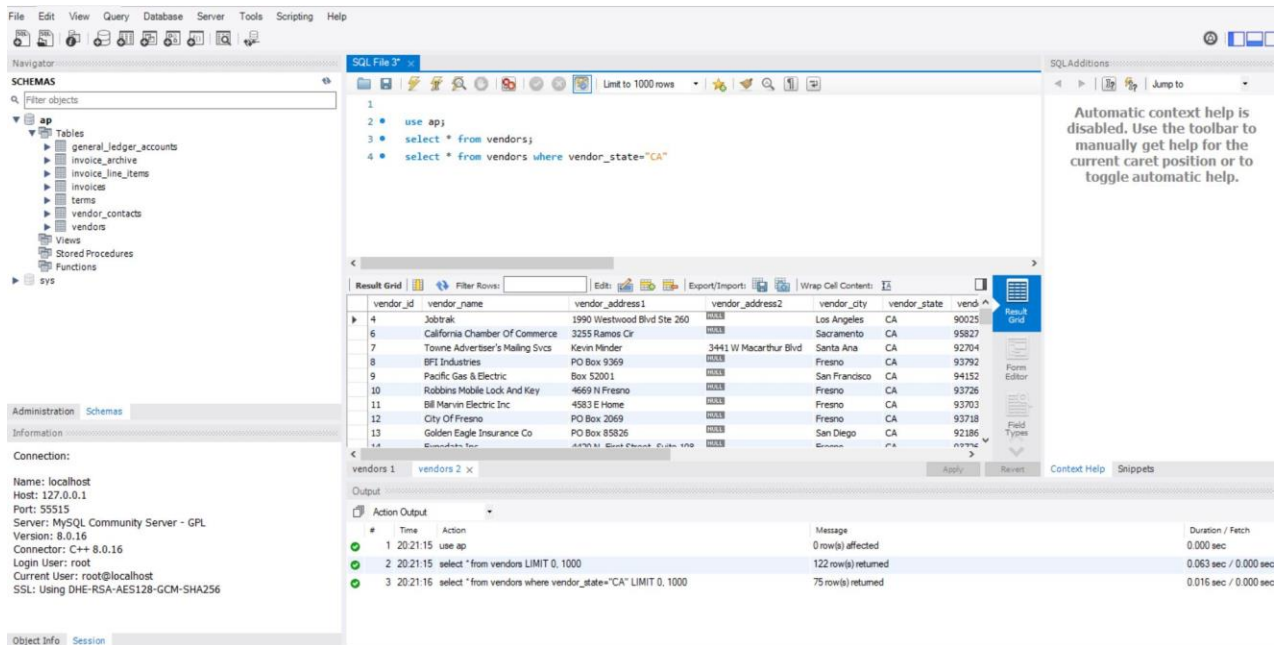**LAB 2 MYSQL WORKBENCH**

1. **Make sure the MySQL server is running**

Answer:

2. Check whether the MySQL server is running. If it isn't, start it. When you're done, close the Startup/Shutdown window.
   Answer:

Use MySQL Workbench to review the Accounts Payable (AP) database

3. In the Navigator window, expand the node for the AP database so you can see all of the database objects it contains.

4) View the data for the Vendors and Invoices tables.

```
2 •   use ap;
3 •   select * from vendors ,invoices;
4
```
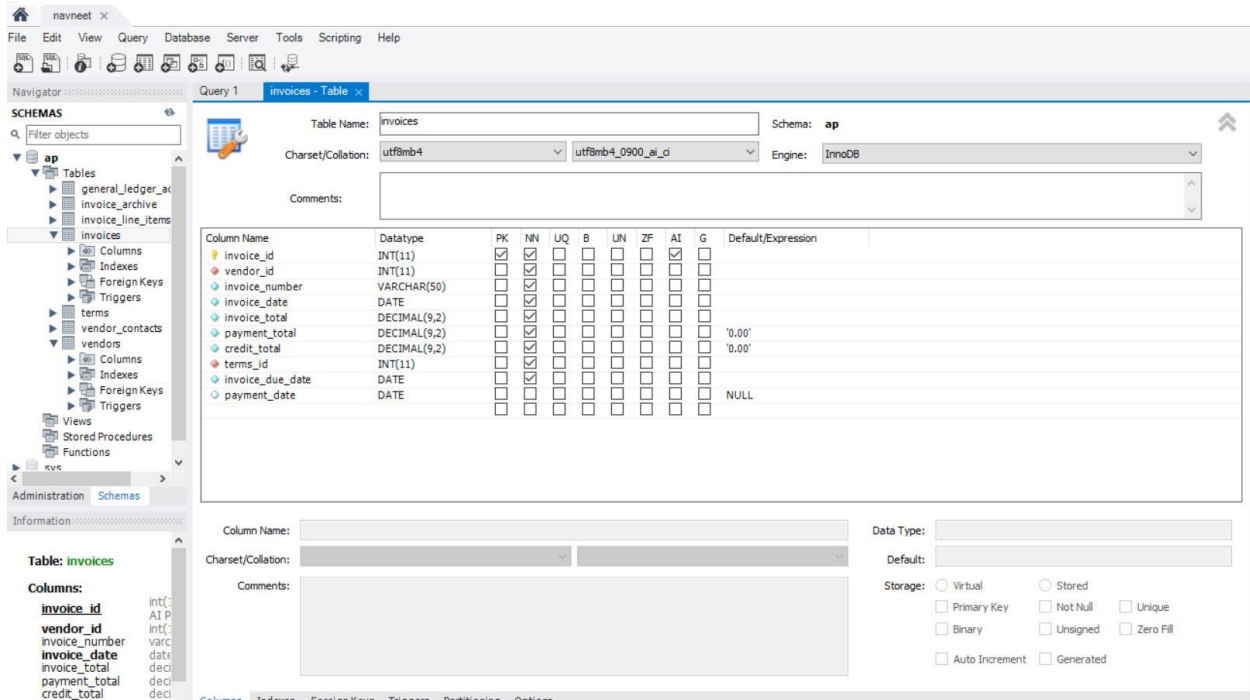
ap
- Tables
  - general_ledger_accounts
  - invoice_archive
  - invoice_line_items
  - invoices
  - terms
  - vendor_contacts
  - vendors
- Views
- Stored Procedures
- Functions
- sys

Administration Schemas

Information

Connection:

Name: localhost
Host: 127.0.0.1
Port: 55515
Server: MySQL Community Server - GPL
Version: 8.0.16
Connector: C++ 8.0.16
Login User: root
Current User: root@localhost
SSL: Using DHE-RSA-AES128-GCM-SHA256

Object Info Session

Field Types

#	Field	Schema	Table	Type	Character Set	Display Size	Precision	Sca
1	vendor_id	ap	vendors	INT	binary	11	1	
2	vendor_name	ap	vendors	VARCHAR	utf8mb4	50	31	
3	vendor_address1	ap	vendors	VARCHAR	utf8mb4	50	28	
4	vendor_address2	ap	vendors	VARCHAR	utf8mb4	50	21	
5	vendor_city	ap	vendors	VARCHAR	utf8mb4	50	13	
6	vendor_state	ap	vendors	CHAR	utf8mb4	2	2	
7	vendor_zip_code	ap	vendors	VARCHAR	utf8mb4	20	5	
8	vendor_phone	ap	vendors	VARCHAR	utf8mb4	50	14	
9	vendor_contact_last_n...	ap	vendors	VARCHAR	utf8mb4	50	7	
10	vendor_contact_first_...	ap	vendors	VARCHAR	utf8mb4	50	9	
11	default_terms_id	ap	vendors	INT	binary	11	1	
12	default_account_numb...	ap	vendors	INT	binary	11	3	
13	invoice_id	ap	invoices	INT	binary	11	3	
14	vendor_id	ap	invoices	INT	binary	11	3	
15	invoice_number	ap	invoices	VARCHAR	utf8mb4	50	16	
16	invoice_date	ap	invoices	DATE	binary	10	10	
17	invoice_total	ap	invoices	DECIMAL	binary	11	6	

Result 3

Output

Action Output

#	Time	Action	Message
1	20:21:15	use ap	0 row(s) affected
2	20:21:15	select * from vendors LIMIT 0, 1000	122 row(s) returned
3	20:21:16	select * from vendors where vendor_state="CA" LIMIT 0, 1000	75 row(s) returned
4	20:30:19	use ap	0 row(s) affected
5	20:30:20	select * from vendors ,invoices LIMIT 0, 1000	1000 row(s) returned

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

vendor_id	vendor_name	vendor_address1	vendor_address2	vendor_city	vendor_state	vendor_zip_code	vendor_phone	vendor_contact_last_name
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni
9	Pacific Gas & Ele...	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Anthoni

Result 3

Output

Action Output

#	Time	Action	Message
1	20:21:15	use ap	0 row(s) affected
2	20:21:15	select * from vendors LIMIT 0, 1000	122 row(s) returned
3	20:21:16	select * from vendors where vendor_state="CA" LIMIT 0, 1000	75 row(s) returned
4	20:30:19	use ap	0 row(s) affected
5	20:30:20	select * from vendors ,invoices LIMIT 0, 1000	1000 row(s) returned

```
1
2 •  use ap;
3 •  select * from vendors ,invoices;
4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

_last_name	vendor_contact_first_name	default_terms_id	default_account_number	invoice_id	vendor_id	invoice_number	invoice_date	invoice_total	payment_total
	Kaitlyn	3	521	74	102	109596	2014-06-24	41.80	41.80
	Kaitlyn	3	521	75	123	7548906-20	2014-06-24	27.00	27.00
	Kaitlyn	3	521	76	123	963253248	2014-06-24	241.00	241.00
	Kaitlyn	3	521	77	121	97/553	2014-06-25	904.14	904.14
	Kaitlyn	3	521	78	121	97/522	2014-06-28	1962.13	1762.13
	Kaitlyn	3	521	79	100	587056	2014-06-30	2184.50	2184.50
	Kaitlyn	3	521	80	122	989319-467	2014-07-01	2318.03	2318.03
	Kaitlyn	3	521	81	123	263253265	2014-07-02	26.25	26.25
	Kaitlyn	3	521	82	94	203339-13	2014-07-05	17.50	17.50
	Kaitlyn	3	521	83	95	111-92R-10093	2014-07-06	39.77	39.77
	Kaitlyn	3	521	84	123	963253258	2014-07-06	111.00	111.00
	Kaitlyn	3	521	85	123	963253271	2014-07-07	158.00	158.00
	Kaitlyn	3	521	86	123	963253230	2014-07-07	739.20	739.20
	Kaitlyn	3	521	87	123	963253244	2014-07-08	60.00	60.00
	Kaitlyn	3	521	88	123	963253239	2014-07-08	147.25	147.25

Result 3 ✕

Output

Action Output

#	Time	Action	Message
✓ 1	20:21:15	use ap	0 row(s) affected
✓ 2	20:21:15	select * from vendors LIMIT 0, 1000	122 row(s) returned
✓ 3	20:21:16	select * from vendors where vendor_state="CA" LIMIT 0, 1000	75 row(s) returned
✓ 4	20:30:19	use ap	0 row(s) affected
✓ 5	20:30:20	select * from vendors ,invoices LIMIT 0, 1000	1000 row(s) returned

5) Navigate through the database objects and view the column definitions for at least the Vendors and Invoices tables.

Charset/Collation: utf8mb4 / utf8mb4_0900_ai_ci Engine: InnoDB

Comments:

ap
▼ Tables
  ▶ general_ledger_accou
  ▶ invoice_archive
  ▶ invoice_line_items
  ▶ invoices
  ▶ terms
  ▶ vendor_contacts
  ▶ vendors
  Views
  Stored Procedures
  Functions
sys

dministration Schemas

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
vendor_id	INT(11)	☑	☑	☐	☐	☐	☐	☑	☐	
vendor_name	VARCHAR(50)	☐	☑	☑	☐	☐	☐	☐	☐	
vendor_address1	VARCHAR(50)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
vendor_address2	VARCHAR(50)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
vendor_city	VARCHAR(50)	☐	☑	☐	☐	☐	☐	☐	☐	
vendor_state	CHAR(2)	☐	☑	☐	☐	☐	☐	☐	☐	
vendor_zip_code	VARCHAR(20)	☐	☑	☐	☐	☐	☐	☐	☐	
vendor_phone	VARCHAR(50)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
vendor_contact_last_name	VARCHAR(50)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
vendor_contact_first_name	VARCHAR(50)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
default_terms_id	INT(11)	☐	☑	☐	☐	☐	☐	☐	☐	
default_account_number	INT(11)	☐	☑	☐	☐	☐	☐	☐	☐	

Field Types

#	Field	Schema	Table	Type	Character Set	Display Size	Precision	Scale
1	vendor_id	ap	vendors	INT	binary	11	1	0
2	vendor_name	ap	vendors	VARCHAR	utf8mb4	50	31	0
3	vendor_address1	ap	vendors	VARCHAR	utf8mb4	50	28	0
4	vendor_address2	ap	vendors	VARCHAR	utf8mb4	50	21	0
5	vendor_city	ap	vendors	VARCHAR	utf8mb4	50	13	0
6	vendor_state	ap	vendors	CHAR	utf8mb4	2	2	0
7	vendor_zip_code	ap	vendors	VARCHAR	utf8mb4	20	5	0
8	vendor_phone	ap	vendors	VARCHAR	utf8mb4	50	14	0
9	vendor_contact_last_n...	ap	vendors	VARCHAR	utf8mb4	50	7	0
10	vendor_contact_first_...	ap	vendors	VARCHAR	utf8mb4	50	9	0
11	default_terms_id	ap	vendors	INT	binary	11	1	0
12	default_account_numb...	ap	vendors	INT	binary	11	3	0
13	invoice_id	ap	invoices	INT	binary	11	3	0
14	vendor_id	ap	invoices	INT	binary	11	3	0
15	invoice_number	ap	invoices	VARCHAR	utf8mb4	50	16	0
16	invoice_date	ap	invoices	DATE	binary	10	10	0
17	invoice_total	ap	invoices	DECIMAL	binary	11	6	2
18	payment_total	ap	invoices	DECIMAL	binary	11	6	2
19	credit_total	ap	invoices	DECIMAL	binary	11	5	2
20	terms_id	ap	invoices	INT	binary	11	1	0
21	invoice_due_date	ap	invoices	DATE	binary	10	10	0
22	payment_date	ap	invoices	DATE	binary	10	10	0

Use MySQL Workbench to enter and run SQL statements

6) Double-click the AP database to select it. When you do that, MySQL Workbench should display the database in bold.
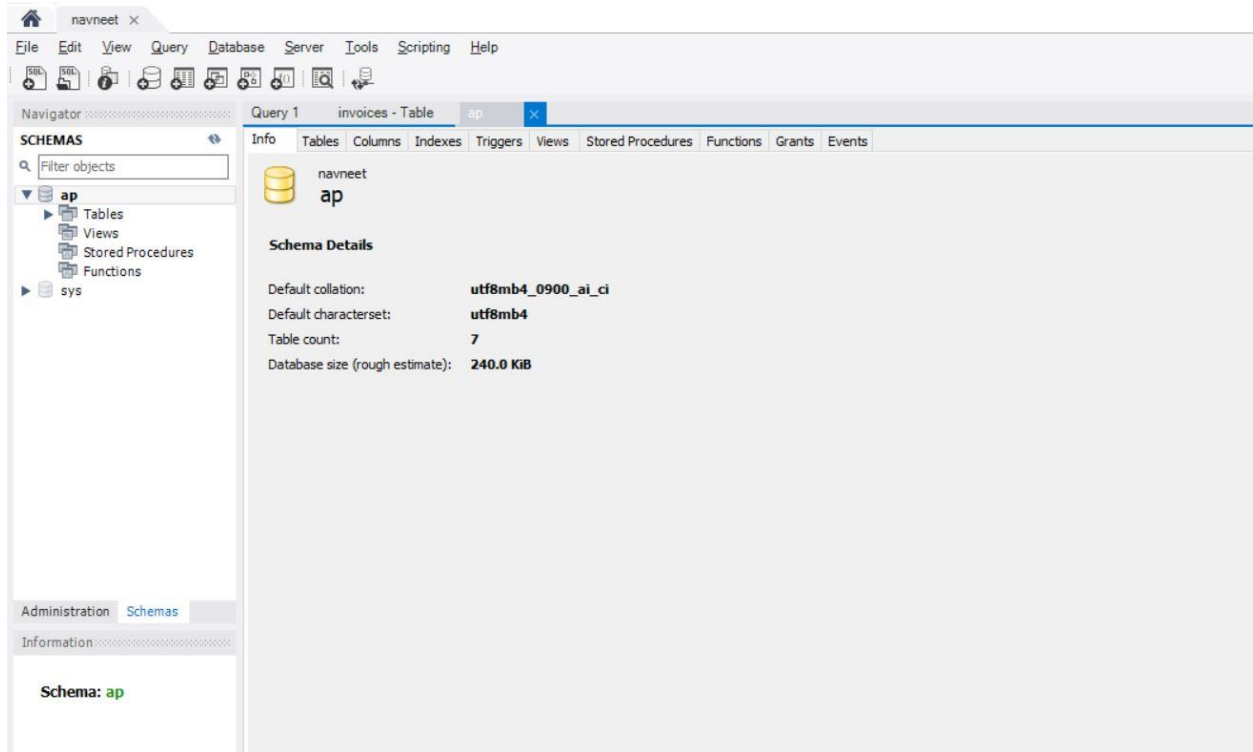
7) Open a SQL Editor tab. Then, enter and run this SQL statement: SELECT vendor_name FROM vendors
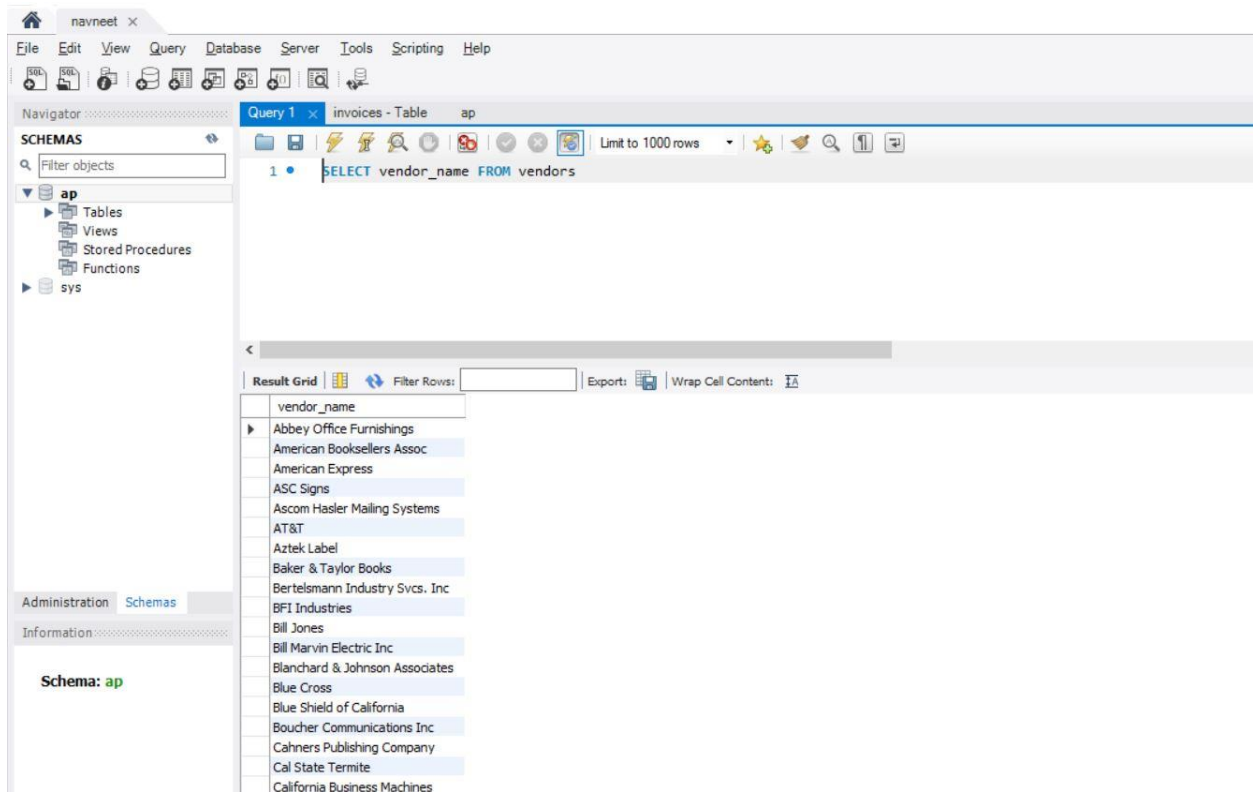
8) Delete the e at the end of vendor_name and run the statement again. Note the error number and the description of the error.
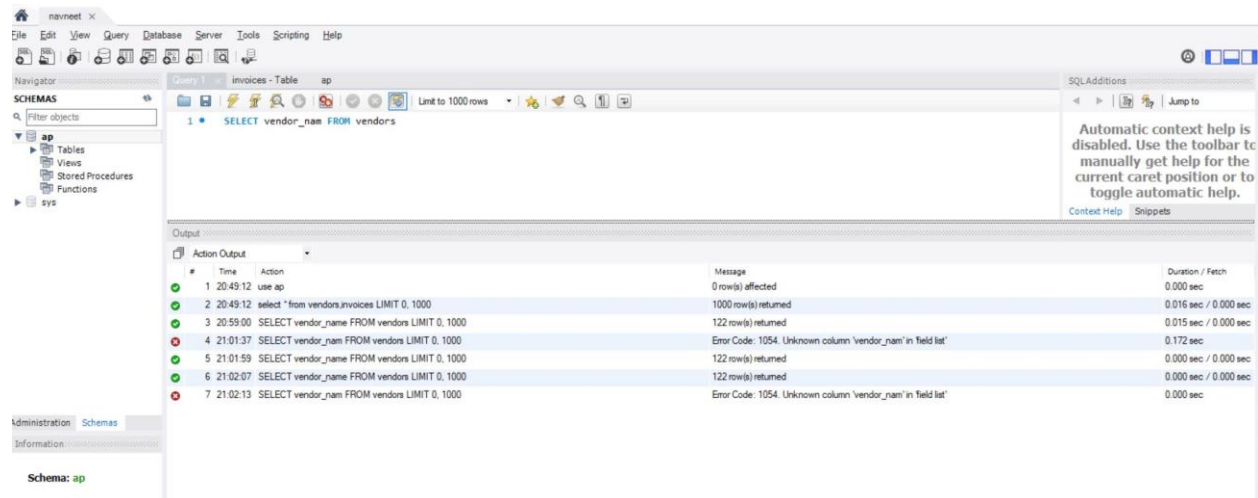

9) Open another SQL Editor tab. Then, enter and run this statement: SELECT COUNT(*) AS number_of_invoices, SUM(invoice_total) AS grand_invoice_total FROM invoices
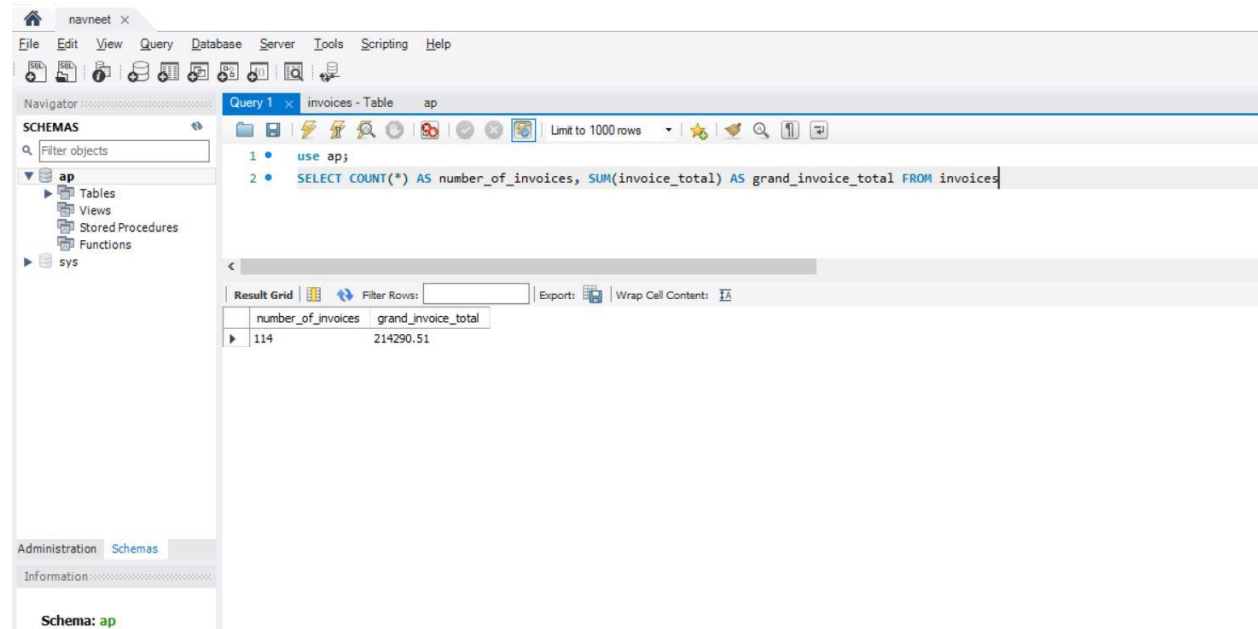
Use MySQL Workbench to open and run scripts

10) Open the select_vendor_city_state script that's in the c:\murach\mysql\scripts\ch02 directory. Note that this script contains just one SQL statement. Then, run the statement.

```
Script: SELECT vendor_name, vendor_city, vendor_state
FROM vendors
ORDER BY vendor_name;
```
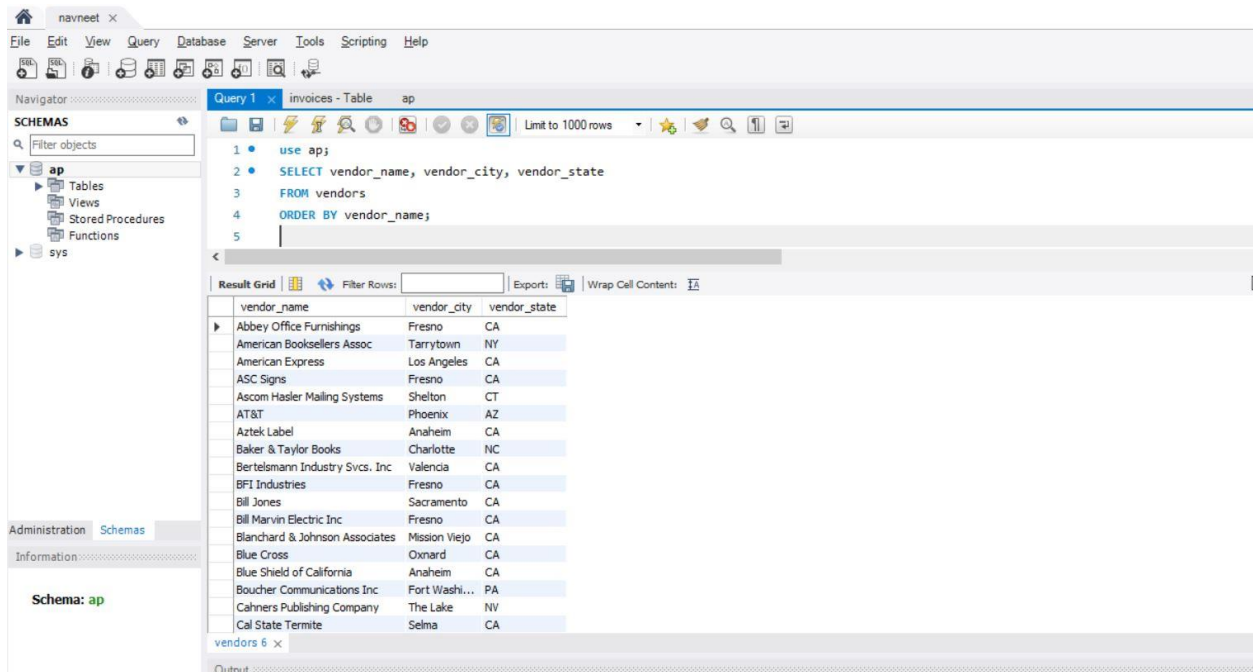
11) Open the select_vendor_total_due script that's in the ch02 directory. Note that this opens another SQL Editor tab.

Script: *SELECT COUNT(*) AS number_of_invoices,*
    SUM(invoice_total – payment_total – credit_total) AS total_due
FROM invoices
WHERE invoice_total – payment_total – credit_total > 0;
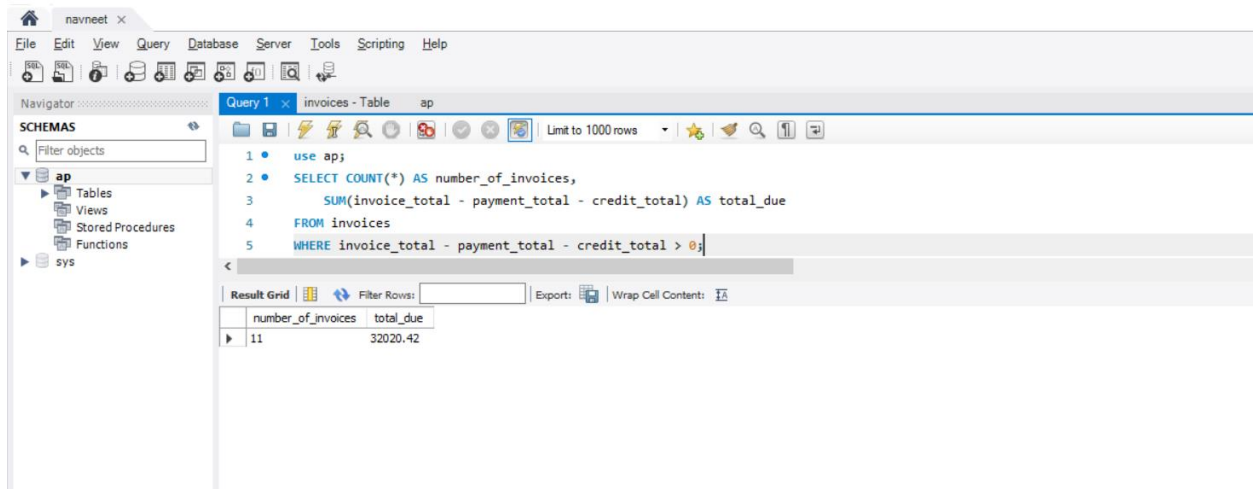
12) Open the select_vendor_information script that's in the ch02 directory. Notice that this script contains two SQL statements that end with semicolons (scroll down if you need to).

13) Press the Ctrl+Shift+Enter keys or click the Execute SQL Script button to run both of the statements in this script. Note that this displays the results in two Result grids. Make sure to view the results of both SELECT statements.

Script: `SELECT vendor_name, vendor_city`
`FROM vendors`
`WHERE vendor_id = 34;`

`SELECT COUNT(*) AS number_of_invoices,`
`    SUM(invoice_total - payment_total - credit_total) AS total_due`
`FROM invoices`
`WHERE vendor_id = 34;`

Answer:

14) Move the insertion point into the first statement and press Ctrl+Enter to run just that statement.

15) Move the insertion point into the second statement and press Ctrl+Enter to run just that statement.

16) Exit from MySQL Workbench.