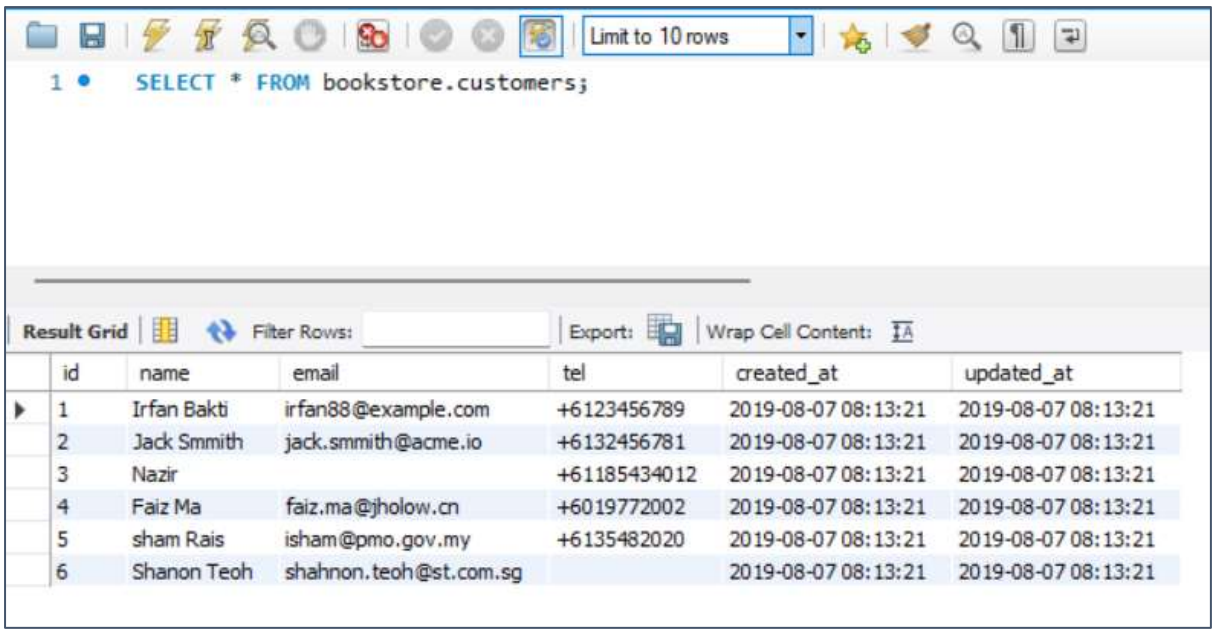
Question 2 (a):

Show schema generation query

Answers:

Table Customers

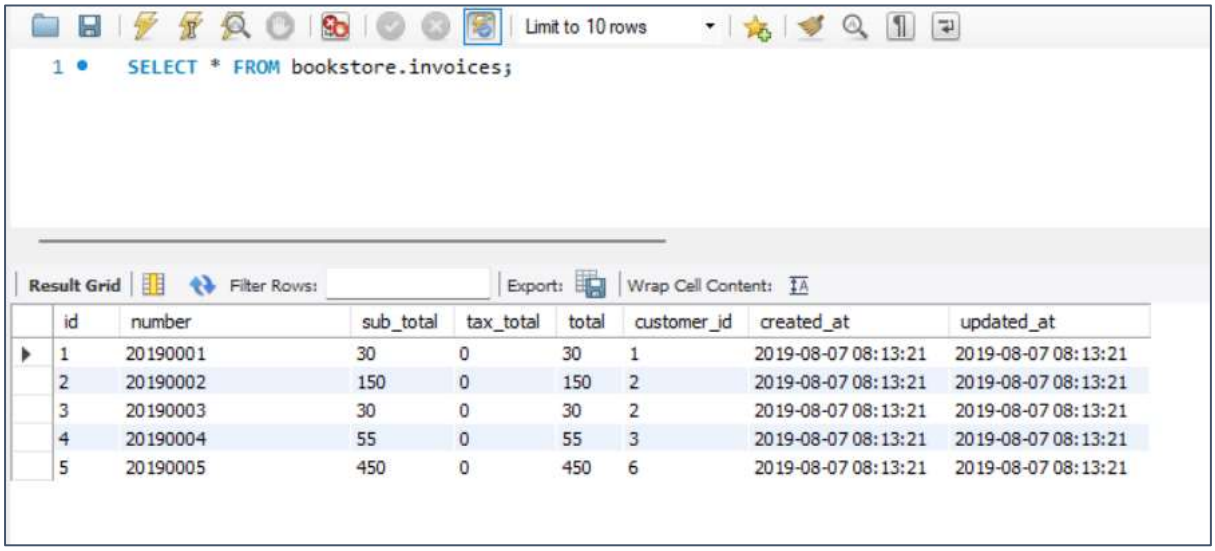


```
SELECT * FROM bookstore.customers;
```

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

id	name	email	tel	created_at	updated_at
1	Irfan Bakti	irfan88@example.com	+6123456789	2019-08-07 08:13:21	2019-08-07 08:13:21
2	Jack Smmith	jack.smmith@acme.io	+6132456781	2019-08-07 08:13:21	2019-08-07 08:13:21
3	Nazir		+61185434012	2019-08-07 08:13:21	2019-08-07 08:13:21
4	Faiz Ma	faiz.ma@jholow.cn	+6019772002	2019-08-07 08:13:21	2019-08-07 08:13:21
5	sham Rais	isham@pmo.gov.my	+6135482020	2019-08-07 08:13:21	2019-08-07 08:13:21
6	Shanon Teoh	shahnon.teoh@st.com.sg		2019-08-07 08:13:21	2019-08-07 08:13:21

Table Invoices



```
SELECT * FROM bookstore.invoices;
```

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

id	number	sub_total	tax_total	total	customer_id	created_at	updated_at
1	20190001	30	0	30	1	2019-08-07 08:13:21	2019-08-07 08:13:21
2	20190002	150	0	150	2	2019-08-07 08:13:21	2019-08-07 08:13:21
3	20190003	30	0	30	2	2019-08-07 08:13:21	2019-08-07 08:13:21
4	20190004	55	0	55	3	2019-08-07 08:13:21	2019-08-07 08:13:21
5	20190005	450	0	450	6	2019-08-07 08:13:21	2019-08-07 08:13:21

Table Invoice Lines

```
1 •  SELECT * FROM bookstore.invoice_lines;
```

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

id	description	unit_price	quantity	sub_total	tax_total	total	tax_id	sku_id	invoice_id
1	Book #1	30	1	30	0	30	NULL	1	1
2	Book #2	25	4	100	0	100	NULL	2	2
3	Book #3	50	1	50	0	50	NULL	3	2
4	Book #1	30	1	30	0	30	NULL	1	3
5	Book #1	30	1	30	0	30	NULL	1	4
6	Book #2	25	1	25	0	25	NULL	2	4
7	Book #1	30	5	150	0	150	NULL	1	5
8	Book #3	50	6	300	0	300	NULL	3	5

Question 2(b): Show the SQL query for number of customers purchasing more than 5 books

Answer:

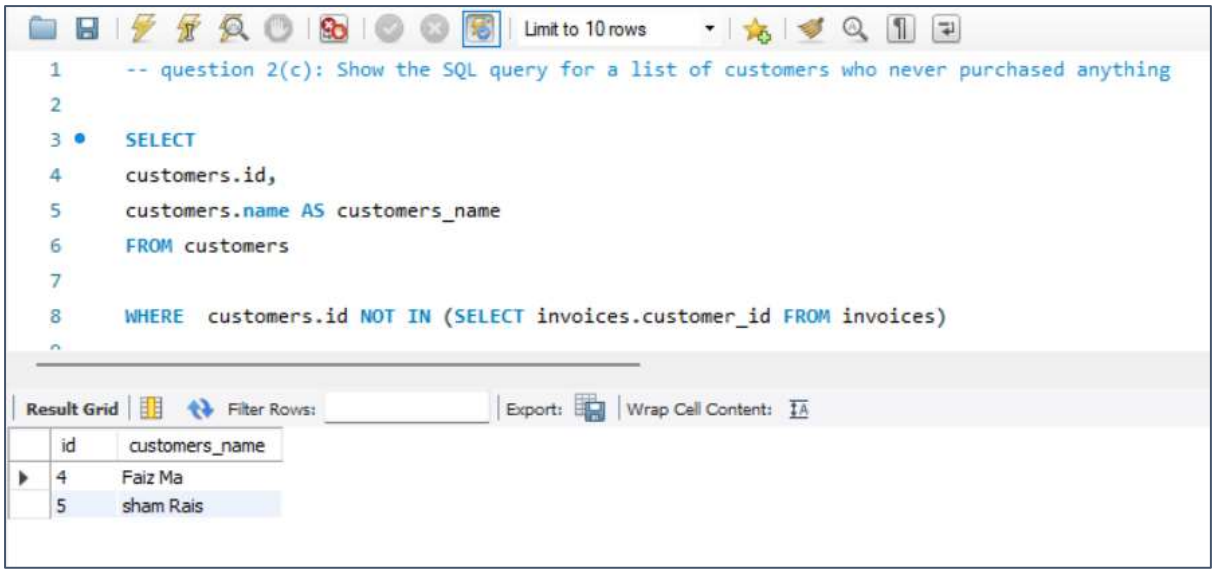
```
3 •  SELECT
4    customers.name AS customers_name,
5    SUM(invoice_lines.quantity)  AS quantity,
6    SUM(invoice_lines.total) AS total_price
7    FROM customers
8
9    JOIN invoices
10   ON invoices.customer_id = customers.id
11
12   JOIN invoice_lines
13   ON invoice_lines.invoice_id = invoices.id
14
15   GROUP BY customers.name
16   HAVING quantity > 5
```

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

customers_name	quantity	total_price
Jack Smmith	6	180
Shanon Teoh	11	450

Question 2(c): Show the SQL query for a list of customers who never purchased anything

Answer:

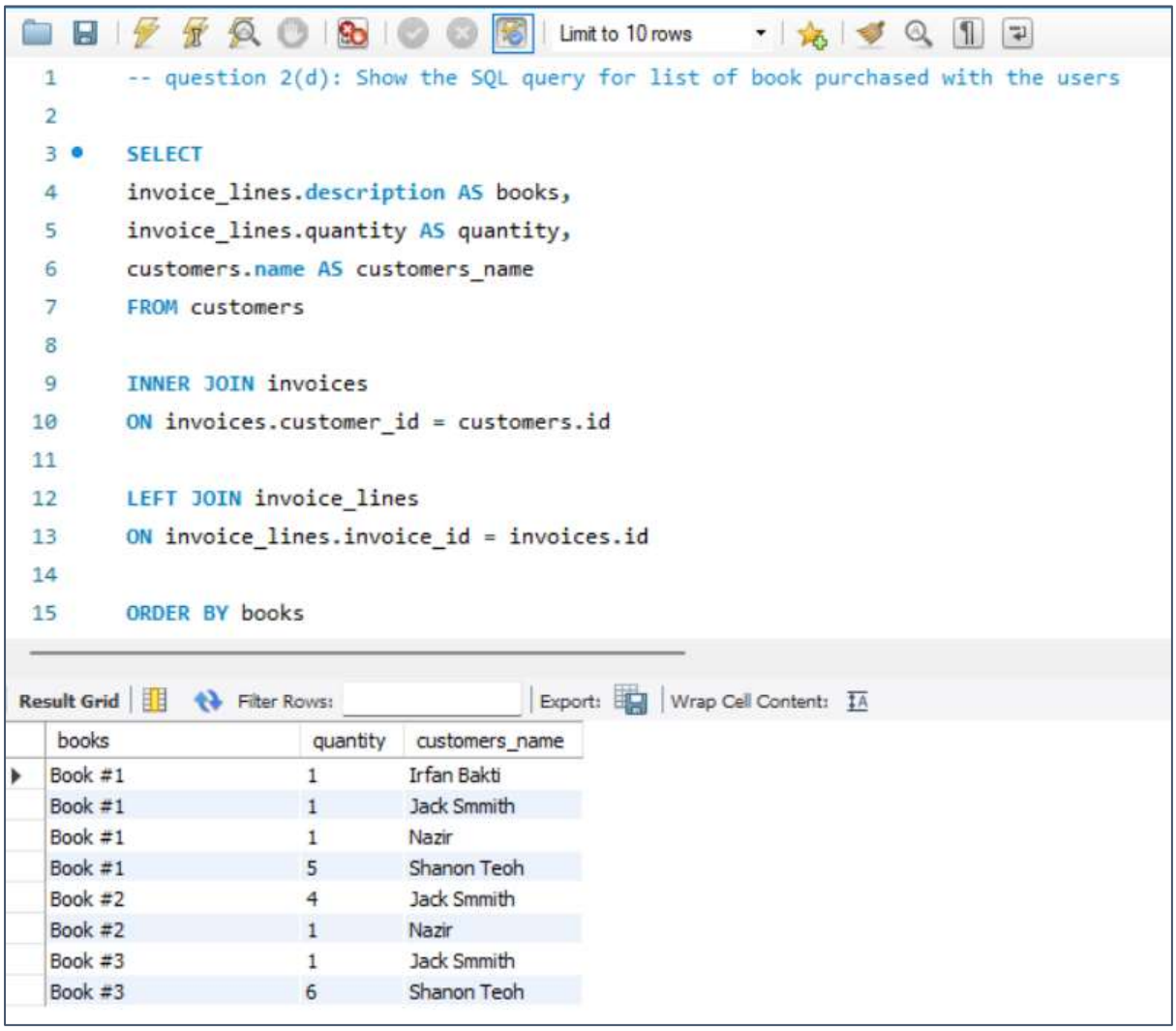


```
-- question 2(c): Show the SQL query for a list of customers who never purchased anything

SELECT
customers.id,
customers.name AS customers_name
FROM customers

WHERE  customers.id NOT IN (SELECT invoices.customer_id FROM invoices)
```

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

id	customers_name
4	Faiz Ma
5	sham Rais

Question 2(d): Show the SQL query for list of book purchased with the users



```
-- question 2(d): Show the SQL query for list of book purchased with the users

SELECT
invoice_lines.description AS books,
invoice_lines.quantity AS quantity,
customers.name AS customers_name
FROM customers

INNER JOIN invoices
ON invoices.customer_id = customers.id

LEFT JOIN invoice_lines
ON invoice_lines.invoice_id = invoices.id

ORDER BY books
```

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

books	quantity	customers_name
Book #1	1	Irfan Bakti
Book #1	1	Jack Smmith
Book #1	1	Nazir
Book #1	5	Shanon Teoh
Book #2	4	Jack Smmith
Book #2	1	Nazir
Book #3	1	Jack Smmith
Book #3	6	Shanon Teoh