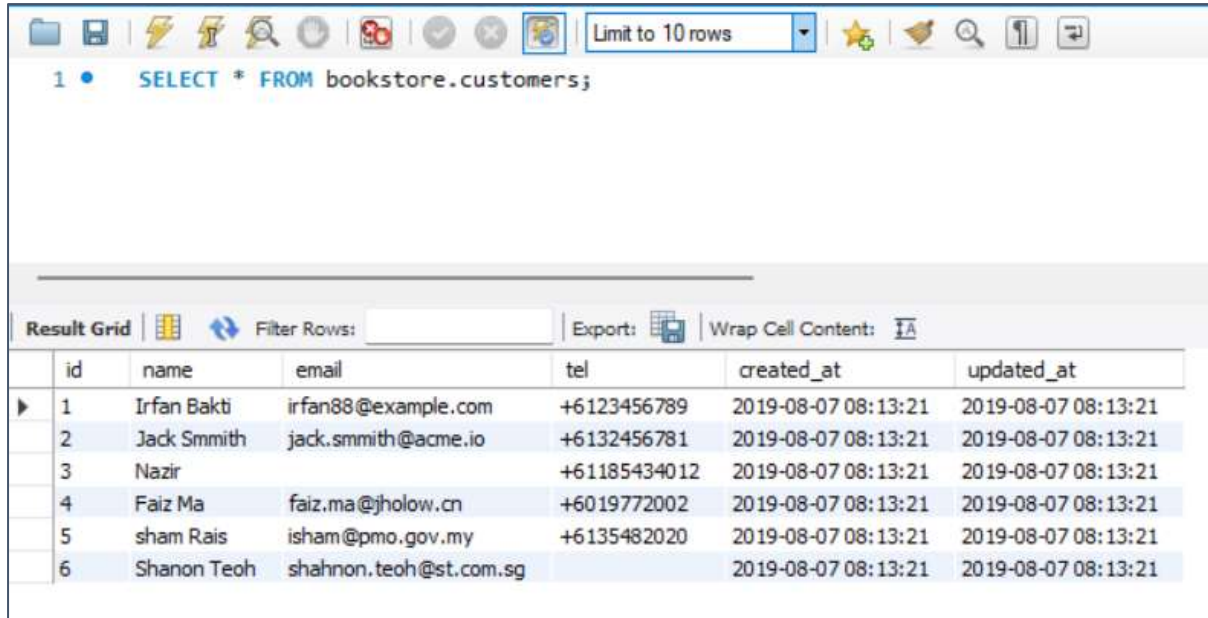


Question 2 (a):

Show schema generation query

Answers:

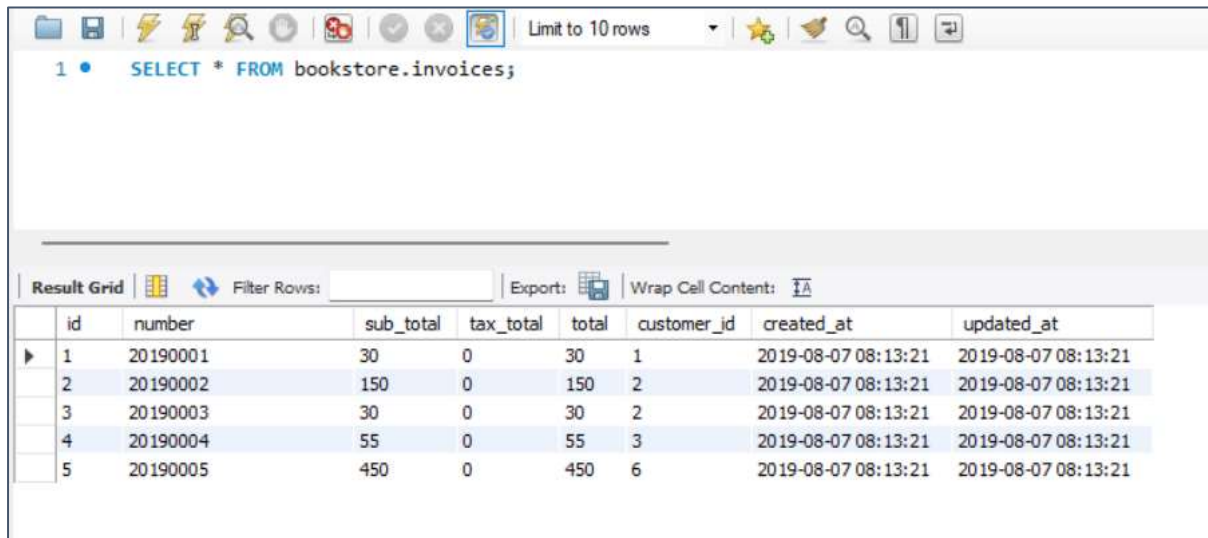
Table Customers



The screenshot shows a database query tool interface. At the top, there is a toolbar with various icons and a dropdown menu set to "Limit to 10 rows". Below the toolbar, the SQL query is displayed: `1 • SELECT * FROM bookstore.customers;`. The query is executed, and the results are shown in a table with 7 columns: `id`, `name`, `email`, `tel`, `created_at`, and `updated_at`. The table contains 6 rows of data.

	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	shannon.teoh@st.com.sg		2019-08-07 08:13:21	2019-08-07 08:13:21

Table Invoices



The screenshot shows a database query tool interface. At the top, there is a toolbar with various icons and a dropdown menu set to "Limit to 10 rows". Below the toolbar, the SQL query is displayed: `1 • SELECT * FROM bookstore.invoices;`. The query is executed, and the results are shown in a table with 9 columns: `id`, `number`, `sub_total`, `tax_total`, `total`, `customer_id`, `created_at`, and `updated_at`. The table contains 5 rows of data.

	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

Limit to 10 rows

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

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

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

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

Answer:

Limit to 10 rows

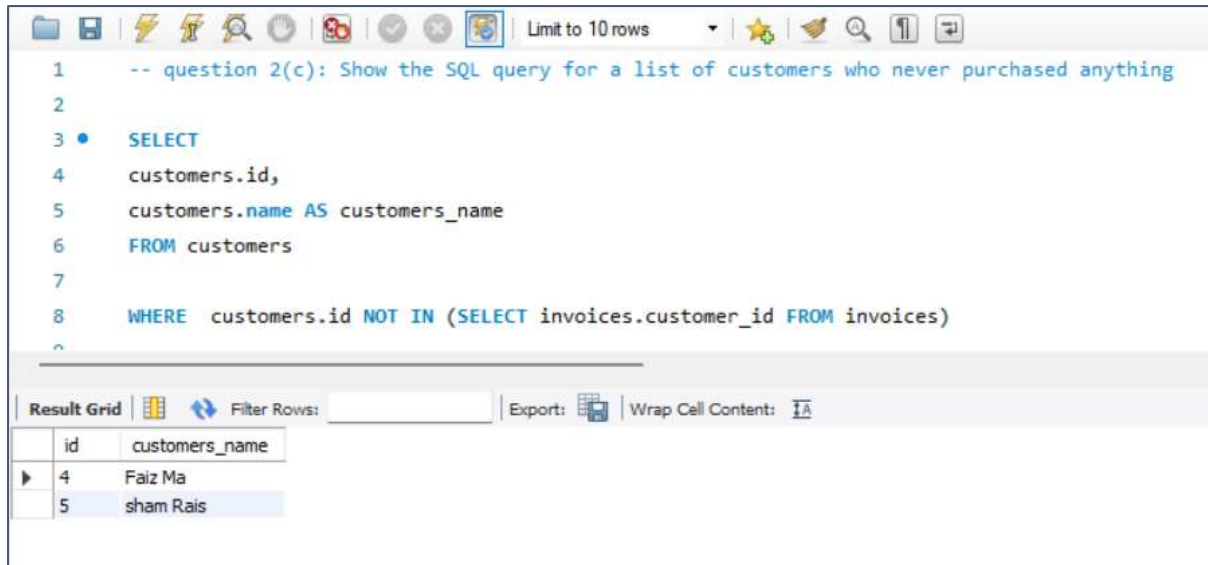
```
3 • SELECT
4     customers.name AS customers_name,
5     SUM(invoice_lines.quantity) AS quantity,
6     SUM(invoice_lines.total) AS total_price
7 FROM customers
8
9 JOIN invoices
10 ON invoices.customer_id = customers.id
11
12 JOIN invoice_lines
13 ON invoice_lines.invoice_id = invoices.id
14
15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

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

	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:



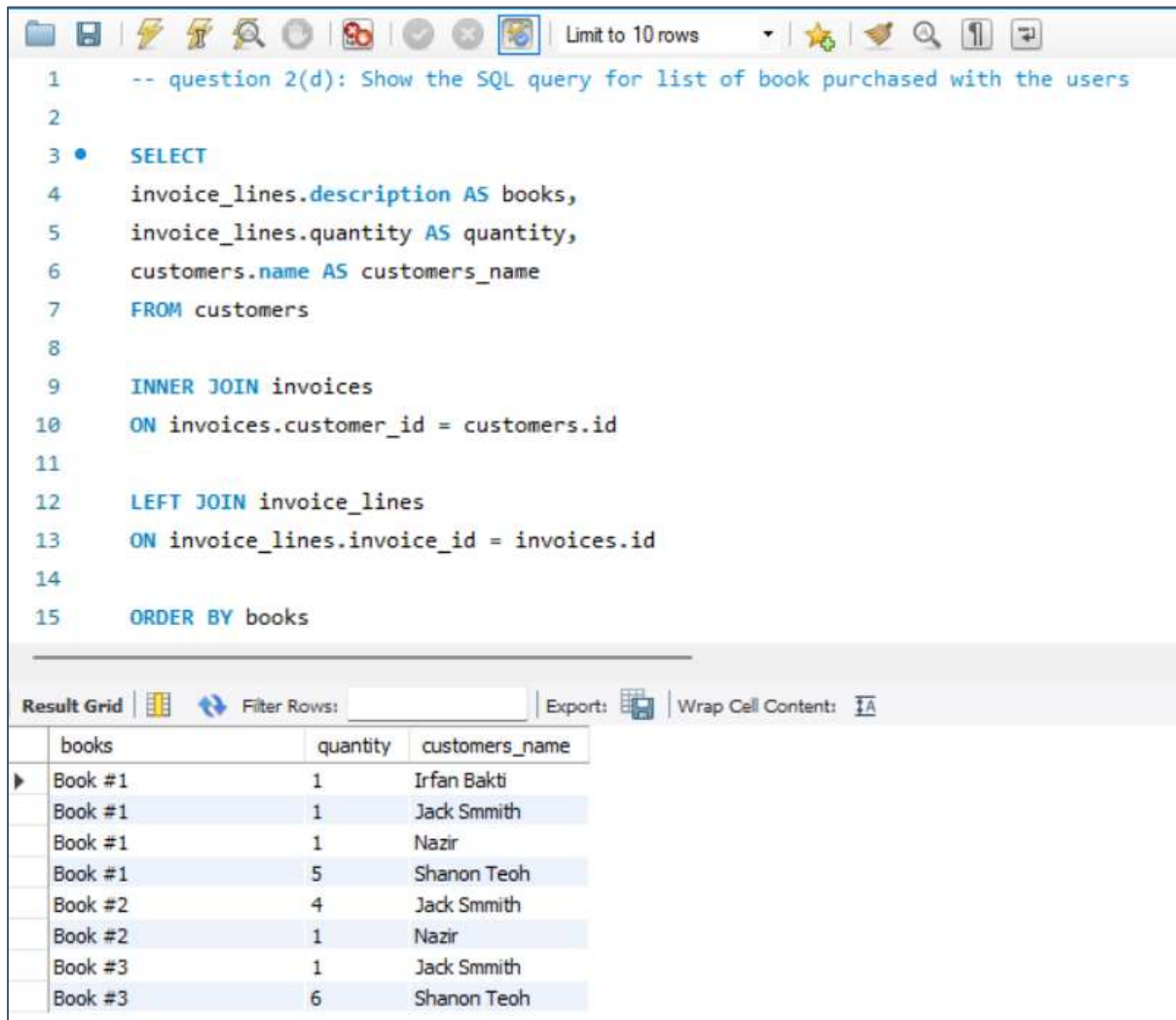
The screenshot shows a SQL IDE interface. The query editor contains the following SQL code:

```
1  -- question 2(c): Show the SQL query for a list of customers who never purchased anything
2
3  •  SELECT
4      customers.id,
5      customers.name AS customers_name
6  FROM customers
7
8  WHERE customers.id NOT IN (SELECT invoices.customer_id FROM invoices)
```

Below the query editor, the 'Result Grid' is displayed with the following data:

	id	customers_name
▶	4	Faiz Ma
	5	sham Rais

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



The screenshot shows a SQL IDE interface. The query editor contains the following SQL code:

```
1  -- question 2(d): Show the SQL query for list of book purchased with the users
2
3  •  SELECT
4      invoice_lines.description AS books,
5      invoice_lines.quantity AS quantity,
6      customers.name AS customers_name
7  FROM customers
8
9      INNER JOIN invoices
10     ON invoices.customer_id = customers.id
11
12     LEFT JOIN invoice_lines
13     ON invoice_lines.invoice_id = invoices.id
14
15     ORDER BY books
```

Below the query editor, the 'Result Grid' is displayed with the following data:

	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