Number of Query	Query	Query Description

1	select
	  (case when count(b.book_id) > 0 then true else false end) as in_stock
	from book b
	  join book_author ba using (book_id)
	  join author a using (author_id)
	  join book_storage
	where b.book_name like '%? %' or a.first_name like '%?%' or
	a.last_name like '%?%'
		Is book 'x' in stock?

2	select
	  first_name,
	  last_name
	from client
	order by created_date
	limit 1;
		Who is the oldest customer?

3	select
	  b.book_name,
	  eb.publication_year,
	  weight,
	  amount_pages,
	  bt.language_name,
	  bs.start_date
	from book_copy
	  join book_storage bs using (book_copy_id)
	  join editorial_book eb using (editorial_book_id)
	  join book b using (book_id)
	  join book_translation bt using (book_id)
	where end_date is null
	order by bs.start_date
	limit 1;
		Which is the oldest book?

4	select
	  b.book_name,
	  c2.first_name,
	  last_name,
	  oo.created_date
	from oorder oo
	  left join communication c using (order_id)
	  join book b using (book_id)
	  join client c2 using (client_id)
	where communication_id is null
	order by oo.created_date;
		List of current orders

5	select count(bs.sale_id) from sale join book_sale bs using (sale_id) join book_copy copy2 using (book_copy_id) join editorial_book eb using (editorial_book_id) join book b using (book_id) join book_author ba using (book_id) join author a using (author_id) where b.book_name like '%?%' or a.first_name like '%?%' or a.last_name like '%?%';	How many of 'y' books were sold by the store?
6	select a.first_name, a.last_name from sale join book_sale bs using (sale_id) join book_copy copy2 using (book_copy_id) join editorial_book book using (editorial_book_id) join book_author ba using (book_id) join author a using (author_id) where created_date > ? and created_date < ? group by author_id order by count(book_sale_id) desc limit 1;	Who is the most read writer during the dates of 'x' and 'y'
7	select c.first_name, c.last_name from sale join client c using (client_id) group by c.client_id order by count(sale_id) desc limit 3;	List of the top 3 buying customers
8	select b.book_name from book b join book_translation translation using (book_id) group by b.book_id order by count(b.book_id) desc limit 1;	What is the book with the largest number of translations currently in stock

9	select
	  s.created_date,
	  (copy2.original_price + copy2.profit) as final_price,
	  b.book_name
	from sale s
	  join client c using (client_id)
	  join book_sale using (sale_id)
	  join book_copy copy2 using (book_copy_id)
	  join editorial_book book2 using (editorial_book_id)
	  join book b using (book_id)
	where first_name = '?' and last_name = '?'
	order by c.created_date;
		Customer 'X' purchase history:
		What books did he purchase, on what dates and what price did he pay for each book

10	select
	  book_name, created_date,
	  (CASE
	  WHEN orders_with_com.order_id is null
	  THEN false
	  ELSE true
	  END) as was_found,
	  (CASE
	  WHEN orders_with_sale.order_id is null
	  THEN false
	  ELSE true
	  END) as was_aquired
	from oorder
	  left join (
	  select oorder.order_id
	  from oorder
	  join communication c on oorder.order_id = c.order_id
	  where client_id = 1
	  ) as orders_with_com
	  using (order_id)
	  left join (
	  select oo.order_id
	  from oorder oo
	  join sale s using (client_id)
	  join book_sale bs using (sale_id)
	  join book_copy copy2 using (book_copy_id)
	  join editorial_book book2 using (editorial_book_id)
	  where s.created_date >= oo.created_date
	  and oo.client_id = ?
		Regarding person 'X': Order history (What and when ordered. Sorted by order dates) (Say if the book was indeed found and if purchased)

11	select
	  delivery_by_book.book_name,
	  delivery_by_book.delivery_name,
	  delivery_by_book.company_name,
	  TRUNCATE((delivery_by_book.price_per_kilo * eb.weight), 2) as delivery_price
	from (select *
	  from book b, delivery_type d) delivery_by_book
	  join editorial_book eb using (book_id);
		Shipping cost calculation

12	book_name,
	  tracking_number,
	  delivery_name,
	  company_name,
	  delivery_status_name
	from delivery
	  join book_sale_delivery delivery2 on delivery.delivery_id = delivery2.delivery_id
	  join delivery_type t on delivery.delivery_type_id = t.delivery_type_id
	  join delivery_status s on delivery.delivery_status_id = s.delivery_status_id
	  join book_sale sale on delivery2.book_sale_id = sale.book_sale_id
	  join book_copy copy2 on sale.book_copy_id = copy2.book_copy_id
	  join editorial_book book2 using (editorial_book_id)
	  join book b using (book_id)
	  join (
	  select
	  count(bs.book_sale_id),
	  sale_id
	  from book_sale bs
	  join book_sale_delivery delivery on bs.book_sale_id = delivery.book_sale_id
	  join delivery d on delivery.delivery_id = d.delivery_id
	  join sale using (sale_id)
	  where client_id = ?
	  group by sale_id
	  having count(bs.book_sale_id) > 1
	  ) splitted_deliveries using (sale_id);
		Has Customer 'X' ever split a book purchase for multiple shipments and if so
		what is the shipping data

13	select delivery_status_name from delivery_status join delivery d using (delivery_status_id) where tracking_number = '?';	What is the current status of a particular shipment

14	select count(*)
	from book_sale_delivery
	  join book_sale sale on book_sale_delivery.book_sale_id = sale.book_sale_id
	  join delivery d on book_sale_delivery.delivery_id = d.delivery_id
	  join delivery_type t on d.delivery_type_id = t.delivery_type_id
	  join sale s on sale.sale_id = s.sale_id
	
	where company_name = 'XPress'
	  and month(s.created_date) = ?
		What is the amount of shipments made by Xpress during a particular month

15	select TRUNCATE(IFNULL(sum(profit + original_price), 0), 2) as total
	from book_sale bs
	  join book_copy copy2 on bs.book_copy_id = copy2.book_copy_id
	  join sale s using (sale_id)
	  join payment_type t2 using (payment_type_id)
	where payment_name = 'Bit'
	  and month(s.created_date) = ?;
		The total money transferred to the store account via Bit during a certain month

16	select
	  book_name,
	  CONCAT(CONCAT(first_name, ' '), last_name),
	  (profit + original_price) as final_price
	from book_sale bs
	  join book_copy copy2 using (book_copy_id)
	  join sale s using (sale_id)
	  join payment_type t2 using (payment_type_id)
	  join editorial_book eb using (editorial_book_id)
	  join book b using (book_id)
	  join client c using (client_id)
	where s.created_date < NOW() and s.created_date > DATE_ADD(NOW(), INTERVAL -12 MONTH)
	  and profit > (select avg(profit)
	  from book_sale bs
	  join book_copy copy2 on bs.book_copy_id = copy2.book_copy_id
	  join sale s using (sale_id)
	  join payment_type t2 using (payment_type_id));
		What are the transactions that have been made during the last 12 months, and which have yielded greater profit than the average profit in these 12 months

17	select
	  company_name,
	  count(book_delivery_id)
	from book_sale_delivery bs
	  join book_sale sale on bs.book_sale_id = sale.book_sale_id
	  join delivery d on bs.delivery_id = d.delivery_id
	  join delivery_type t on d.delivery_type_id = t.delivery_type_id
	  join book_copy copy2 on sale.book_copy_id = copy2.book_copy_id
	  join editorial_book book2 using (editorial_book_id)
	  join sale s on sale.sale_id = s.sale_id
	where s.created_date < NOW() and s.created_date >
	DATE_ADD(NOW(), INTERVAL -12 MONTH)
	group by company_name;
		How many shipments have been made in the last 12 months by Israeli mail and how many were were made by the delivery company, Xpress

18	select
	  book_name,
	  tracking_number,
	  delivery_status_name,
	  delivery_name,
	  company_name
	from delivery
	  join (
	  select
	  count(distinct book.editorial_book_id),
	  book_id,
	  delivery2.delivery_id
	  from delivery
	  join book_sale_delivery delivery2 on delivery.delivery_id =
	delivery2.delivery_id
	  join book_sale sale on delivery2.book_sale_id =
	sale.book_sale_id
	  join book_copy copy2 on sale.book_copy_id =
	copy2.book_copy_id
	  join editorial_book book on copy2.editorial_book_id =
	book.editorial_book_id
	  group by book_id, delivery2.delivery_id
	  having count(distinct book.editorial_book_id) > 1
	  ) multiple_edition_deliveries using (delivery_id)
	  join delivery_status s using (delivery_status_id)
	  join delivery_type t using (delivery_type_id)
	  join book using (book_id);
		Data on all shipments made ever that include at least 2 different editions of the same book

19	select CONCAT(CONCAT(first_name, ' '), last_name),
	  phone_number,
	  mobile_number,
	  created_date
	from client
	where client_id not in (
	  select client_id
	  from sale s
	  where s.created_date < NOW() and s.created_date >
	DATE_ADD(NOW(), INTERVAL -24 MONTH)
	);
		Data on all customers who have previously purchased, at any time, at least one book from the store, and who have not made any purchases during the last 24 months

20	select CONCAT(CONCAT(first_name, ' '), last_name), phone_number, mobile_number, created_date
	from client
	where client_id in (
	  select o.client_id
	  from communication c
	  join oorder o using (order_id)
	  join editorial_book using (book_id)
	  join book_copy copy2 using (editorial_book_id)
	  join book_sale sale using (book_copy_id)
	  join editorial_book bought_book on copy2.editorial_book_id =
	bought_book.editorial_book_id
	  join sale s using (sale_id)
	  where c.created_date < DATE_ADD(NOW(), INTERVAL -14 DAY)
	  and bought_book.book_id = editorial_book.book_id
	  and s.client_id = o.client_id
	  and s.created_date >= c.created_date
	);
		List of customers who placed orders, the books they ordered arrived at the store,
		the store contacted them to inform them of the availability of the book.
		The contact was made 14 days ago, and customers have not yet purchased the book.

21	select
	  MONTH(dd), YEAR(dd),
	  sum(is_between)
	from (
	  SELECT
	  c.dd,
	  bs.book_copy_id,
	  bs.start_date,
	  IFNULL(bs.end_date, DATE(NOW())) as end_date,
	  (CASE
	  WHEN c.dd between start_date and IFNULL(bs.end_date, DATE(NOW()))
	  THEN 1
	  ELSE 0
	  END) as is_between
	  from calendar c, book_storage bs
	  join storage s using (storage_id)
	  where storage_name = 'Warehouse'
	) books_per_month
	group by 1, 2
	order by 2, 1;
		Number of books in the warehouse on a monthly basis

22	select
	  count(book_copy_id),
	  sum(original_price)
	from purchase
	  join book_copy copy2 using (book_copy_id)
	where created_date between '?' and '?';
		How many books did the store purchase between D1 and D2, and what was the total payment for them.

23	select (select sum(original_price + profit)
	  from sale
	  join book_sale bs on sale.sale_id = bs.sale_id
	  join book_copy copy2 on bs.book_copy_id = copy2.book_copy_id
	  where MONTH(created_date) = ?) - (select sum(original_price)
	  from purchase
	  join book_copy copy2 using (book_copy_id)
	  where MONTH(created_date) = ?) as month_profit;
		The store profits from sales in a particular month

24	select YEAR(dd), count(s.sale_id)/12 from calendar left join sale s on YEAR(s.created_date) = YEAR(dd) group by YEAR(dd) order by YEAR(dd) asc;	Annual average monthly transactions
25	select IFNULL(sum(hours_count * hourly_salary), 0) as net_salary from employee_history join employee_schedule es using (employee_id) join employee e using(employee_id) where month_id = ? and year_id = ? and employee_id = ?;	Gross salary of employee 'Z' in a given month

26	select CONCAT(CONCAT(e.first_name, ' '), e.last_name)
	from sale
	join employee e using(employee_id)
	  where month(created_date) = ?
	  and year(created_date) = ?
	group by employee_id
	order by count(sale_id) desc
	limit 1
		Who is the employee with the most sales per month?