

```
-- Question: Your manager is only interested in looking at the 10 most  
-- recent transactions in the `customer_purchases` table.
```

```
select  
    *  
from `market.customer_purchases`
```

```
select  
    market_date,  
    transaction_time,  
    quantity,  
    cost_to_customer_per_qty  
from `market.customer_purchases`  
order by market_date desc, transaction_time desc  
limit 10
```

```
select  
    market_date,  
    transaction_time,  
    quantity,  
    cost_to_customer_per_qty  
from `market.customer_purchases`  
order by market_date desc, transaction_time desc  
limit 2  
offset 1
```

```
-- Order of Execution of a SQL query:
```

```
-- • FROM - The database gets the data from tables in FROM clause.
-- • SELECT - It determines which columns to include in the final result set.
-- • ORDER BY - It allows you to sort the result set based on one or more
-- columns, either in ascending or descending order.
-- • OFFSET - The specified number of rows are skipped from the beginning
-- of the result set.
-- • LIMIT - After skipping the rows, the LIMIT clause is applied to restrict
-- the number of rows returned.
```

```
-- Question: In the customer purchases, we have quantity and cost
-- per qty separate, query the total amount that the customer has
-- paid along with date, customer id, vendor_id, qty, cost per qty and
-- the total amount?
```

```
select
market_date,
customer_id,
vendor_id,
quantity,
cost_to_customer_per_qty,
round(quantity*cost_to_customer_per_qty, 2) as total_amount
from `market.customer_purchases`
```

```
select round(493.67234, 2)
```

```
-- Question: We want to merge each customer's name into a single
-- column that contains the first name, then a space, and then the
-- last name.
```

```
select
*
from `market.customer`
limit 5
```

```
select
customer_first_name,
customer_last_name,
concat(customer_first_name, " " , customer_last_name) as full_name
from `market.customer`
```

-- Question: In a customer's full_name, we want the first_name to be
-- in upper case followed by the last_name as it is.

```
select
customer_first_name,
customer_last_name,
concat(upper(customer_first_name), " " , customer_last_name) as full_name
from `market.customer`
```

-- "Jane C" --> Say we want to display only the first character of someone's
last_name?

```
select
customer_first_name,
customer_last_name,
concat(customer_first_name, " " , SUBSTR(customer_last_name, 1, 1)) as full_name
from `market.customer`
```

```
-- Question: We have a customer with first_name "john" and
-- last_name "doe". How can we properly format his name by
-- capitalizing the first letter of the first & last name while keeping all
-- other letters in lowercase? --> "John Doe"
```

```
select
  concat(
    upper(substr("john",1,1)),
    LOWER(substr("john",2)),
    " ",
    upper(substr("doe", 1, 1)),
    lower(substr("doe",2))
  )
```

```
select upper(substr("john",1,1))
```

```
--HW --> INITCAP() --> BigQuery
```

```
select concat(initcap("john") , " ", initcap("doe"))
```

```
-- Question: Extract all the product names that are part of product
-- category 1
```

```
select
  *
from `market.product`
limit 5
```

```
select
    product_id,
    product_name,
    product_category_id
from `market.product`
WHERE product_category_id = 1
```

-- Similarly, what if we want all the product names that are part of
-- any other product category except 1?

```
select
    product_id,
    product_name,
    product_category_id
from `market.product`
WHERE product_category_id <> 1
```

-- Question: Get all the product info for products with id between 3
-- and 8 (not inclusive) and of products with id 10.

```
select
    *
from `market.product`
where (product_id > 3 and product_id < 8) or product_id = 10
```

-- Question: Find the booth assignments for vendor_id 7 for all dates
-- between April 3, 2019 and May 16, 2019, including the 2 dates.

-- Question: Return a list of customers with the following last names:

```
-- [Diaz, Edwards, Wilson]
```

```
select
    customer_id,
    customer_first_name,
    customer_last_name
from `market.customer`
where
    customer_last_name = "Diaz"
or
    customer_last_name = "Edwards"
or
    customer_last_name = "Wilson"
```

```
select
    customer_id,
    customer_first_name,
    customer_last_name
from `market.customer`
where
    customer_last_name IN ("Edwards" , "Diaz", "Wilson")
```