## Intermediate Assignment

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# Overview of Dataset

- thelook\_ecommerce

  - events
  - inventory\_items
  - ☐ order\_items
  - orders
  - products
  - **users**

TheLook is fictitious eCommerce clothing site developed by the Looker team. The dataset contains information about customers, products, orders, logistics, web events and digital marketing campaigns. The contents of this dataset are synthetic, and are provided to industry practitioners for the purpose of product discovery, testing, and evaluation.

## Q1: Get the total users who completed the order and total orders per month (Jan 2019 - April 2022)

Row	month	total_users	total_order							
1	2019-01-01	9	9							
2	2019-02-01	20	20							
3	2019-03-01	42	42							
4	2019-04-01	58	58	90	CHEMA	DETAILS	PREVIEW			
5	2019-05-01	77	78	30	ZI LIVIA	DETAILS	I KEVIEW			
6	2019-06-01	92	92							
7	2019-07-01	136	136		<b>—</b> Filton 5					
8	2019-08-01	126	126		- Filter E	nter property na	me or value			
9	2019-09-01	174	174		Field name	Туре	Mode	Collation		
10	2019-10-01	167	168		Tiola name	1,700	mode	Condition		
11	2019-11-01	198	198		month	DATE	NULLABLE			
12	2019-12-01	240	241		total_users	INTEGER	NULLABLE			
13	2020-01-01	261	263	_						
14	2020-02-01	287	290		total_order	INTEGER	NULLABLE			
15	2020-03-01	339	340							
16	2020-04-01	336	337							
17	2020-05-01	380	382							
18	2020-06-01	361	362							
19	2020-07-01	392	392							
20	2020-08-01	472	475							
								Results per page:	50 ▼	1 - 40 of 40

### Q1 SQL Syntax

#### Link Query:

```
select date_trunc(date(created_at), month) as month,
  count(distinct user_id)AS total_users,
  count(distinct order_id)AS total_order
from `bigquery-public-data.thelook_ecommerce.orders`
where created_at between '2019-01-01' and '2022-05-01'
and status = "Complete"
group by 1
order by 1;
```

## Q2: Get average order value and total number or unique users, grouped by month (Jan 2019 - April 2022)

Row	month	users	aov				
1	2019-01-01	26	58.24				
2	2019-02-01	87	52.83				
3	2019-03-01	157	53.97				
4	2019-04-01	228	62.02	SCHEMA	DETAILS	PREVIEW	
5	2019-05-01	349	60.01	OOTILINIA	DETAILO	1111111111	
6	2019-06-01	387	61.19				
7	2019-07-01	497	58.32	— Filter	Enter property p	ama ar valua	
8	2019-08-01	553	60.83	- Filter	Enter property n	arrie or value	
9	2019-09-01	658	62.45	Field name	Type	Mode	Collation
10	2019-10-01	695	57.81				
11	2019-11-01	819	57.75	month	DATE	NULLABLE	
12	2019-12-01	924	57.16	users	INTEGER	NULLABLE	
3	2020-01-01	1054	59.18	201	FLOAT	NULLABLE	
14	2020-02-01	1080	60.08	aov	FLUAT	NULLABLE	
15	2020-03-01	1378	62.51				
16	2020-04-01	1359	58.9				
17	2020-05-01	1498	60.06				
18	2020-06-01	1539	59.22				
19	2020-07-01	1723	59.28				
20	2020-08-01	1883	60.1				

### Q2 SQL Syntax

#### Link Query:

```
select date_trunc(date(created_at), month) as month,
  count(distinct user_id) as users,
  round(avg(sale_price), 2) as aov
from `bigquery-public-data.thelook_ecommerce.order_items`
where created_at between '2019-01-01' and '2022-05-01'
group by 1
order by 1;
```

## Q3: Find the first and last name of users from the youngest and oldest age of each gender

Row	gender	age	first_name	last_name	status_age					
	F	12	Emily	Anderson	Youngest					
2	F	12	Julie	Mora	Youngest		COLIEMA	DETAILO	DDEVIEW	
3	F	12	Kimberly	Huang	Youngest	•	SCHEMA	DETAILS	PREVIEW	
4	F	12	Andrea	Robinson	Youngest					
5	F	12	Mary	Wilkins	Youngest		_ =::- =			
5	F	12	Heather	Weaver	Youngest		Filter En	ter property na	ame or value	
7	F	12	Tina	Hicks	Youngest		Field name	Туре	Mode	Collation
3	F	12	Colleen	Hampton	Youngest					
	F	12	Amanda	Hendrix	Youngest		gender	STRING	NULLABLE	
0	F	12	Stephanie	Rodriguez	Youngest		age	INTEGER	NULLABLE	
1	F	12	Maria	Fisher	Youngest	-	first_name	STRING	NULLABLE	
2	F	12	Nicole	Richardson	Youngest	-				
3	F	12	Jenna	Jones	Youngest		last_name	STRING	NULLABLE	
4	F	12	Mallory	Dunlap	Youngest		status_age	STRING	NULLABLE	
15	F	12	Julia	Fisher	Youngest	-				
16	F	12	Sheena	Tapia	Youngest					
17	F	12	Jenna	Hernandez	Youngest					
18	F	12	Courtney	Ayers	Youngest					
9	F	12	Brianna	Sanchez	Youngest					
20	F	12	Debra	Delgado	Youngest					

### Q3 SQL Syntax

#### Link Query:

```
with minMax as
  select gender,
    max(age) as oldest,
    min(age) as youngest,
  from `bigquery-public-data.thelook_ecommerce.users`
  group by 1
select users.gender,
  users.age,
  users.first_name,
  users.last_name,
case
  when users.age = minMax.oldest then 'Oldest'
  else 'Youngest'
end as status_age
from `bigquery-public-data.thelook_ecommerce.users` as users
join minMax on users.gender = minMax.gender
  and (users.age = (minMax.oldest) or users.age = (minMax.youngest))
order by 1,2;
```

## Q4: Get the top 5 most profitable product and its profit detail breakdown by month

Row	month	product_id	product_name	sales	cost	profit	ranking			
1	2019-01-01	21242	Joe's Jeans Men's Malcolm Classic Fit Jean	158.0	80.58	77.42	1			
2	2019-01-01	4903	Red Engine Women's Cayenne Skinny Jean	172.0	96.32	75.68	2			
3	2019-01-01	21245	Diesel Men's Larkee 880F Relaxed Straight-Leg Jean	139.99	69.58	70.41	3	SCHEMA	DETAILS	PREVIEW
4	2019-01-01	15624	Womens Plus Size Pulse/Iceburg Snowboarding/ski Coat Jacket Technical 3in1 Blue White Black or Coral 1X 2X 3X	139.99	75.31	64.68	4			
5	2019-01-01	14785	Sweet Mommy Satin Maternity and Nursing Dress	109.0	45.67	63.33	5	= Filter	Enter property r	nama ar valua
6	2019-02-01	3610	Robert Rodriguez Women's Long Sleeve Fitted Pencil Dress	395.0	159.97	235.03	1	= Filter	Enter property i	lattle of value
7	2019-02-01	19008	Dale Of Norway Anniversary Quarter-zip Sweater	325.0	167.37	157.63	2	Field name	Type	Mode
8	2019-02-01	4250	True Religion Women's Tony Pony Express Slim Jean	235.0	132.54	102.46	3	month	DATE	NULLABLE
9	2019-02-01	8017	Ed Garments Women's Fully lined Pinstripe Suit Coat. 6660	166.99	65.46	101.53	4	product_id	INTEGE	ER NULLABLE
10	2019-02-01	7577	Pendleton Women's Petite Encore Blazer	158.27	64.42	93.85	5			
11	2019-03-01	24296	Diesel Men's Weroker Jacket	282.24	128.42	153.82	1	product_na		
12	2019-03-01	20058	Austin Reed Men's Signature Two Piece Suit	230.18	82.63	147.55	2	sales	FLOAT	NULLABLE
13	2019-03-01	29027	Canada Goose Men's Aviator Hat	225.0	94.27	130.73	3	cost	FLOAT	NULLABLE
14	2019-03-01	8026	IGIGI by Yuliya Raquel Plus Size Monroe Jacket	158.0	59.41	98.59	4	profit	FLOAT	NULLABLE
15	2019-03-01	23652	Men's Air Force A-2 Flight Leather Bomber Jacket	179.99	81.72	98.27	5	ranking	INTEGE	ER NULLABLE
16	2019-04-01	20366	Robert Graham Men's Barbican Velvet Blazer	698.0	305.03	392.97	1			
17	2019-04-01	3360	Parker Women's Beaded Shift Dress	396.0	173.84	222.16	2			
18	2019-04-01	7747	McGinn Women's Sasha Tweed Jacket	325.0	110.18	214.82	3			
19	2019-04-01	13758	Tom Ford Marko FT0144 Sunglasses - 18V Shiny Rhodium (Blue Lens) - 58mm	297.95	112.33	185.62	4			
20	2019-04-01	3679	Parker Women's Cap Sleeve Beaded Dress	352.0	170.02	181.98	5			

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### Q4 SQL Syntax

#### Link Query:

```
with detailProduct as(
  select date_trunc(date(created_at),month) as month,
    products.id as product_id,
    name as product_name.
    round(sum(order_items.sale_price), 2) as sales,
    round(sum(cost), 2) as cost,
    round(sum(retail_price-cost), 2) as profit
  from `bigguery-public-data.thelook_ecommerce.products` as products
  join `bigquery-public-data.thelook_ecommerce.order_items` as order_items
    on products.id = order_items.product_id
  group by 1,2,3
  order by 1
select * from(
 select *.
  row_number() over(partition by detailProduct.month order by detailProduct.profit desc) as ranking
 from detailProduct
) sort
where sort.ranking <= 5
order by sort.month;
```

## Q5: Get Month to Date of total revenue in each products categories of past 3 months, breakdown by date (Current date 15 April 2022)

Row	date_month	category	revenue				
1	2022-01-15	Accessories	772.88				
2	2022-01-15	Intimates	586.79	SCHEMA	DETAILS	PREVIEW	
3	2022-01-15	Socks & Hosiery	167.79				
4	2022-01-15	Socks	254.38				
5	2022-01-15	Active	826.1				
6	2022-01-15	Plus	332.28	Filter E	nter property n	ame or value	
7	2022-01-15	Underwear	274.75				
8	2022-01-15	Sleep & Lounge	923.79	Field name	Type	Mode	Collati
9	2022-01-15	Swim	1494.38	date_month	DATE	NULLABLE	
10	2022-01-15	Shorts	1042.39	date_month	DATE	NULLABLE	
11	2022-01-15	Pants & Capris	207.97	category	STRING	NULLABLE	
12	2022-01-15	Jeans	1962.72				
13	2022-01-15	Fashion Hoodies & Sweatshirts	1101.52	revenue	FLOAT	NULLABLE	
14	2022-01-15	Tops & Tees	604.86				
15	2022-01-15	Outerwear & Coats	2180.66				
16	2022-01-15	Maternity	313.84				
17	2022-01-15	Sweaters	1564.87				
18	2022-01-15	Dresses	1821.12				
19	2022-01-15	Leggings	197.32				

### Q5 SQL Syntax

#### Link Query:

```
with detailProduct as(
  select date_trunc(date(created_at), day) as date_month,
    category as category,
    round(sum(order_items.sale_price), 2) as revenue,
  from `bigguery-public-data.thelook_ecommerce.products` as products
  join `bigquery-public-data.thelook_ecommerce.order_items` as order_items
    on products.id = order_items.product_id
  group by 1,2
  order by 1
select *
from detailProduct
where detailProduct.date_month between date_sub('2022-04-15', interval 3 month) and '2022-
04-15'
```

# Thank you