SALES OF E-COMMERCE PLATFORM (GOLD)

1)Explore all countries our customers come from.

```
SELECT DISTINCT COUNTRY
FROM DIM_CUSTOMERS;
```

2) Explore all categories of products.

SELECT DISTINCT CATEGORY FROM DIM_PRODUCTS;

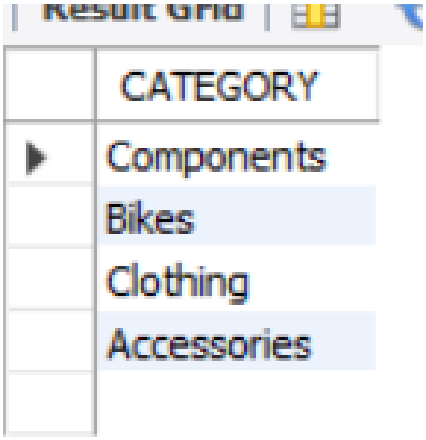
OR

SELECT

DISTINCT CATEGORY ,SUBCATEGORY,

PRODUCT_NAME FROM DIM_PRODUCTS

ORDER BY 1,2,3;



	CATEGORY
▶	Components
	Bikes
	Clothing
	Accessories

3) Find the first and last order date.

```
SELECT
MIN(ORDER_DATE) AS FIRST_ORDER_DATE,
MAX(ORDER_DATE) AS LAST_ORDER_DATE
FROM FACT_SALES;
```

	FIRST_ORDER_DATE	LAST_ORDER_DATE
▶	2010-12-29	2014-01-28

4) Find the youngest and oldest customer.

```
SELECT
MIN(BIRTHDATE) AS OLDEST_BIRTHDATE,
TIMESTAMPDIFF(YEAR, MIN(BIRTHDATE), CURDATE()) AS
OLDEST_AGE,
MAX(BIRTHDATE) AS YOUNGEST_BIRTHDATE,
TIMESTAMPDIFF(YEAR, MAX(BIRTHDATE), CURDATE()) AS
YOUNGEST_AGE
```

FROM (SELECT DISTINCT BIRTHDATE FROM DIM_CUSTOMERS

WHERE NOT BIRTHDATE='') AS A;

	OLDEST_BIRTHDATE	OLDEST_AGE	YOUNGEST_BIRTHDATE	YOUNGEST_AGE
▶	1916-02-10	109	1986-06-25	38

Business Question

5) GENERATE A REPORT THAT SHOWS ALL KEY METRICS OF THE BUSINESS.

SELECT 'TOTAL_SALES' AS MEASURE_NAME, SUM(SALES_AMOUNT) AS MEASURE_VALUES FROM FACT_SALES

UNION ALL

SELECT 'TOTAL_QUANTITY' AS MEASURE_NAME,SUM(QUANTITY) AS MEASURE_VALUES FROM FACT_SALES

UNION ALL

SELECT 'AVERAGE_SELLING_PRICE' AS MEASURE_NAME,ROUND(AVG(PRICE),0) AS MEASURE_VALUES FROM FACT_SALES

UNION ALL

SELECT 'TOTAL_ORDERS' AS MEASURE_NAME,COUNT(DISTINCT ORDER_NUMBER) AS MEASURE_VALUES FROM FACT_SALES

UNION ALL

SELECT 'TOTAL_PRODUCTS' AS MEASURE_NAME,COUNT(DISTINCT PRODUCT_NAME) AS MEASURE_VALUES FROM DIM_PRODUCTS

UNION ALL

SELECT 'TOTAL_REGISTER_CUSTOMERS' AS MEASURE_NAME,COUNT(CUSTOMER_KEY) AS MEASURE_VALUES FROM DIM_CUSTOMERS

```
UNION ALL
SELECT 'TOTAL_ORDER_CUSTOMERS' AS
MEASURE_NAME,COUNT(DISTINCT CUSTOMER_KEY) AS
MEASURE_VALUES FROM FACT_SALES;
```

MEASURE_NAME	MEASURE_VALUES
TOTAL_SALES	29356250
TOTAL_QUANTITY	60423
AVERAGE_SELLING_PRICE	486
TOTAL_ORDERS	27659
TOTAL_PRODUCTS	295
TOTAL_REGISTER_CUSTOMERS	18484
TOTAL_ORDER_CUSTOMERS	18484

6) Find the total customers by countries.

```
SELECT
COUNTRY,
COUNT(CUSTOMER_ID) AS TOTAL_CUSTOMERS
FROM DIM_CUSTOMERS
GROUP BY COUNTRY
ORDER BY 2 DESC;
```

	COUNTRY	TOTAL_CUSTOMERS
▶	United States	7482
	Australia	3591
	United Kingdom	1913
	France	1810
	Germany	1780
	Canada	1571
	n/a	337

7) Find the total customers by gender.

```
SELECT
GENDER,
COUNT(CUSTOMER_ID) AS TOTAL_CUSTOMERS
FROM DIM_CUSTOMERS
GROUP BY GENDER;
```

	GENDER	TOTAL_CUSTOMERS
▶	Male	9341
	Female	9128
	n/a	15

8) Find total products by category.

```
SELECT
CATEGORY,
COUNT(PRODUCT_KEY) AS TOTAL_PRODUCTS
FROM DIM_PRODUCTS
GROUP BY CATEGORY
ORDER BY 2 DESC;
```

	CATEGORY	TOTAL_PRODUCTS
▶	Components	127
	Bikes	97
	Clothing	35
	Accessories	29

9) Find average cost in each category.

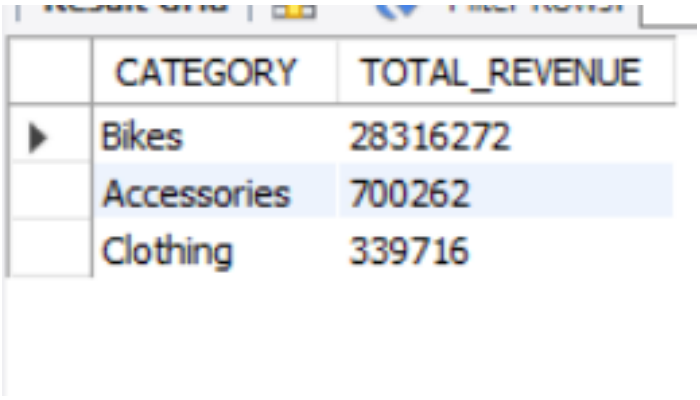
```
SELECT
CATEGORY,
AVG(COST) AS AVG_COST
FROM DIM_PRODUCTS
GROUP BY CATEGORY
ORDER BY 2 DESC;
```

	CATEGORY	AVG_COST
▶	Bikes	949.4433
	Components	264.7165
		28.5714
	Clothing	24.8000
	Accessories	13.1724

10) Find total revenue generated for each category.

```
SELECT
P.CATEGORY,
```

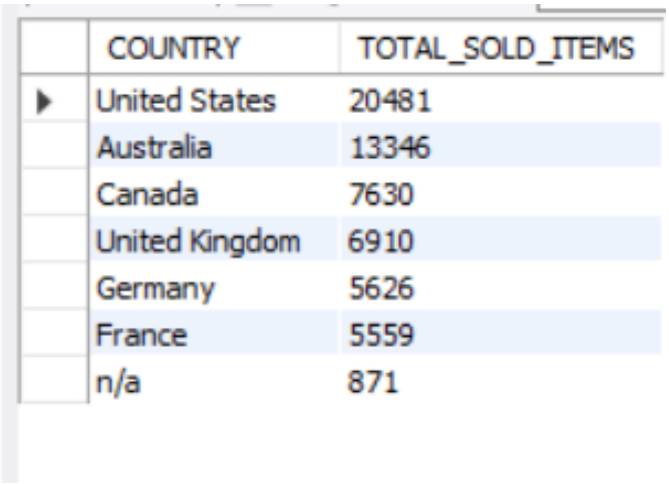
```
SUM(F.SALES_AMOUNT) AS TOTAL_REVENUE
FROM FACT_SALES AS F LEFT JOIN DIM_PRODUCTS AS P
ON F.PRODUCT_KEY=P.PRODUCT_KEY
GROUP BY P.CATEGORY
ORDER BY 2 DESC;
```



CATEGORY	TOTAL_REVENUE
Bikes	28316272
Accessories	700262
Clothing	339716

11) What is the distribution of item sold across country.

```
SELECT
C.COUNTRY,
SUM(F.QUANTITY) AS TOTAL_SOLD_ITEMS
FROM FACT_SALES AS F LEFT JOIN DIM_CUSTOMERS AS C
ON F.CUSTOMER_KEY=C.CUSTOMER_KEY
GROUP BY C.COUNTRY
ORDER BY  2 DESC;
```



COUNTRY	TOTAL_SOLD_ITEMS
United States	20481
Australia	13346
Canada	7630
United Kingdom	6910
Germany	5626
France	5559
n/a	871

12) Find the total revenue generated by each customer.

```
SELECT
C.CUSTOMER_KEY,
C.FIRST_NAME,
C.LAST_NAME,
SUM(F.SALES_AMOUNT) AS TOTAL_REVENUE
FROM FACT_SALES AS F LEFT JOIN DIM_CUSTOMERS AS C
ON F.CUSTOMER_KEY=C.CUSTOMER_KEY
GROUP BY C.CUSTOMER_KEY,C.FIRST_NAME,C.LAST_NAME
ORDER BY 4 DESC;
```

CUSTOMER_KEY	FIRST_NAME	LAST_NAME	TOTAL_REVENUE
6005	Krista	Torres	2419
13829	Brooke	Reed	2419
18367	Dominic	Patel	2419
14064	Dylan	Williams	2419
14015	Juan	Reed	2419
16821	Joel	Patel	2419
16840	Susan	Li	2419
18304	Arturo	Pal	2419
14156	Theresa	Alonso	2419
13641	Lisa	Yang	2419
14431	Alyssa	Hall	2419
15222	Kari	Chapman	2419
17704	Felicia	Suarez	2419
13943	Steven	James	2419
18368	Randy	Ye	2419
14043	Arif	Rizaldy	2419

13) Which 5 products generate highest revenue.

```
SELECT
P.PRODUCT_NAME ,
SUM(F.SALES_AMOUNT) AS TOTAL_REVENUE
FROM FACT_SALES AS F LEFT JOIN DIM_PRODUCTS AS P ON
F.PRODUCT_KEY=P.PRODUCT_KEY
GROUP BY P.PRODUCT_NAME
ORDER BY 2 DESC
LIMIT 5;
```

	PRODUCT_NAME	TOTAL_REVENUE
▶	Mountain-200 Black- 46	1373454
	Mountain-200 Black- 42	1363128
	Mountain-200 Silver- 38	1339394
	Mountain-200 Silver- 46	1301029
	Mountain-200 Black- 38	1294854

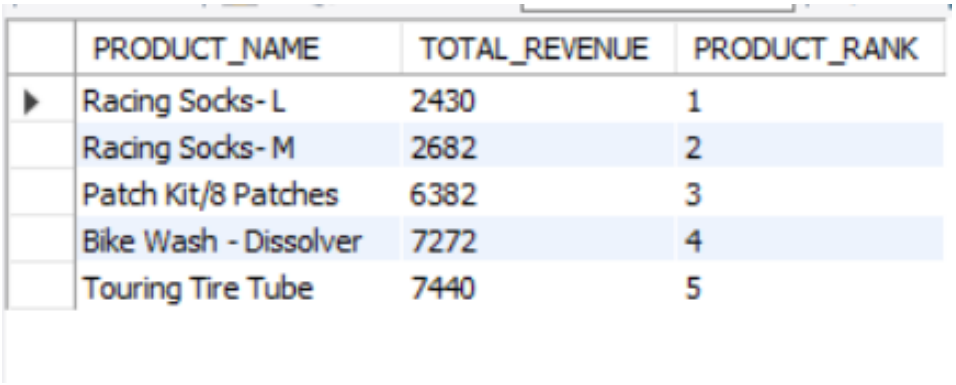
14) Which 5 products generate worst revenue.

```
SELECT *
FROM
(SELECT
P.PRODUCT_NAME ,
SUM(F.SALES_AMOUNT) AS TOTAL_REVENUE,
RANK() OVER(ORDER BY SUM(F.SALES_AMOUNT)) AS
PRODUCT_RANK
```

```
FROM FACT_SALES AS F LEFT JOIN DIM_PRODUCTS AS P ON
F.PRODUCT_KEY=P.PRODUCT_KEY

GROUP BY P.PRODUCT_NAME) AS A

WHERE PRODUCT_RANK<=5;
```



PRODUCT_NAME	TOTAL_REVENUE	PRODUCT_RANK
Racing Socks- L	2430	1
Racing Socks- M	2682	2
Patch Kit/8 Patches	6382	3
Bike Wash - Dissolver	7272	4
Touring Tire Tube	7440	5

GitHub Repo: https://github.com/Jaypatwal102/E_COMMERCE_SALES.git