Q1. What are the least popular categories of products sold ?

```
USE mydb;
CREATE VIEW Least_Popular_Categories AS
SELECT D.CategoryID, CategoryName, sum(Transaction_Amount) as Total_Amount
FROM mydb.order AS A
INNER JOIN mydb.order_has_product AS B
ON A.OrderID=B.OrderID
INNER JOIN mydb.product AS C
on B.ProductID=C.ProductID
INNER JOIN mydb.product_category AS D
on C.CategoryID=D.CategoryID
GROUP BY D.CategoryID, CategoryName
ORDER BY Total_Amount ASC;
```

Q2. Which retail stores have the most amount of sales ?

```
USE mydb;
CREATE VIEW Top_Sales_Stores AS
SELECT E.Store_Name,E.Store_City,E.Store_State, sum(Transaction_Amount) as
Total_Amount
FROM mydb.order AS A
INNER JOIN mydb.order_has_product AS B
ON A.OrderID=B.OrderID
INNER JOIN mydb.product AS C
on B.ProductID=C.ProductID
INNER JOIN mydb.store_has_product AS D
on C.ProductID=D.ProductID
INNER JOIN mydb.store AS E
ON D.StoreID=E.StoreID
GROUP BY E.Store_Name,E.Store_City,E.Store_State
ORDER BY Total_Amount DESC;
```

Q3. Which payment ID is most and least preferred by students ?

```
USE mydb;
CREATE VIEW Payment_Methods AS
SELECT B.PaymentMethod, COUNT(DISTINCT C.CustomerID) as Total_customers
FROM mydb.order AS A
INNER JOIN mydb.payment AS B
ON A.PaymentID=B.PaymentID
INNER JOIN mydb.customer AS C
ON A.CustomerID=C.CustomerID
GROUP BY B.PaymentMethod
ORDER BY Total_customers DESC;
```

Q4. Calculate the total number of discounted and undiscounted products purchased and identify which were purchased more?

```
USE mydb;
CREATE VIEW Product_Quantities AS
```

```
SELECT sum(CASE WHEN C.DISCOUNTID IS NULL THEN Quantity END) as
Number_of_undiscounted_products, sum(CASE WHEN C.DISCOUNTID IS NOT NULL
THEN Quantity END) as Number_of_discounted_products
FROM mydb.order_has_product AS A
INNER JOIN mydb.Product AS B
ON A.ProductID=B.productID
LEFT JOIN mydb.discount AS C
on B.DiscountID=C.DiscountID;
```

Q5. What is the total number of delivery agents in each state? How does these values compare to the number of delivery agents having maximum rating in each of those states?

```
USE mydb;
CREATE VIEW Delivery_Agents_States AS
SELECT Delivery_State, COUNT(DISTINCT B.Delivery_AgentID) AS total_agents,
(SELECT COUNT(DISTINCT B2.Delivery_AgentID)
FROM mydb.delivery AS A2
INNER JOIN (
SELECT Delivery_AgentID
FROM mydb.delivery_agent AS B2
WHERE Agent_Rating = (SELECT MAX(Agent_Rating) FROM mydb.delivery_agent)
) AS B2
ON A2.Delivery_AgentID = B2.Delivery_AgentID
WHERE A2.Delivery_State = A.Delivery_State) AS top_rated_agents
FROM mydb.delivery AS A
INNER JOIN mydb.delivery_agent AS B ON A.Delivery_AgentID =
B.Delivery_AgentID
GROUP BY Delivery_State
ORDER BY total_agents DESC;
```

Q6. How many deliveries were COMPLETED where the estimated delivery time (EDT) is greater than the average EDT of all the completed deliveries?

```
USE mydb;
CREATE VIEW Delayed_Deliveries AS
SELECT COUNT(DISTINCT DeliveryID) AS no_of_delayed_deliveries
FROM
( SELECT DeliveryID, EstimatedDeliveryTime_mins, Delivery_Status FROM
mydb.delivery WHERE Delivery_Status ='Completed') AS A
where EstimatedDeliveryTime_mins > (SELECT
TRUNCATE(AVG(EstimatedDeliveryTime_mins),2) AS Avg_ETA  from
mydb.delivery);
```

Q7. Which state has the most number of delayed deliveries (wherein the EDT is greater than the average EDT) ?

```
USE mydb;
CREATE VIEW States_Delayed_Deliveries AS
SELECT Delivery_State, COUNT(DISTINCT DeliveryID) AS
no_of_delayed_deliveries FROM
```

```
( SELECT DeliveryID, EstimatedDeliveryTime_mins, Delivery_State FROM
mydb.delivery WHERE Delivery_Status ='Completed') AS A
where EstimatedDeliveryTime_mins > (SELECT
TRUNCATE(AVG(EstimatedDeliveryTime_mins),2) AS Avg_ETA  from
mydb.delivery)
GROUP BY Delivery_State
ORDER BY no_of_delayed_deliveries DESC;
```