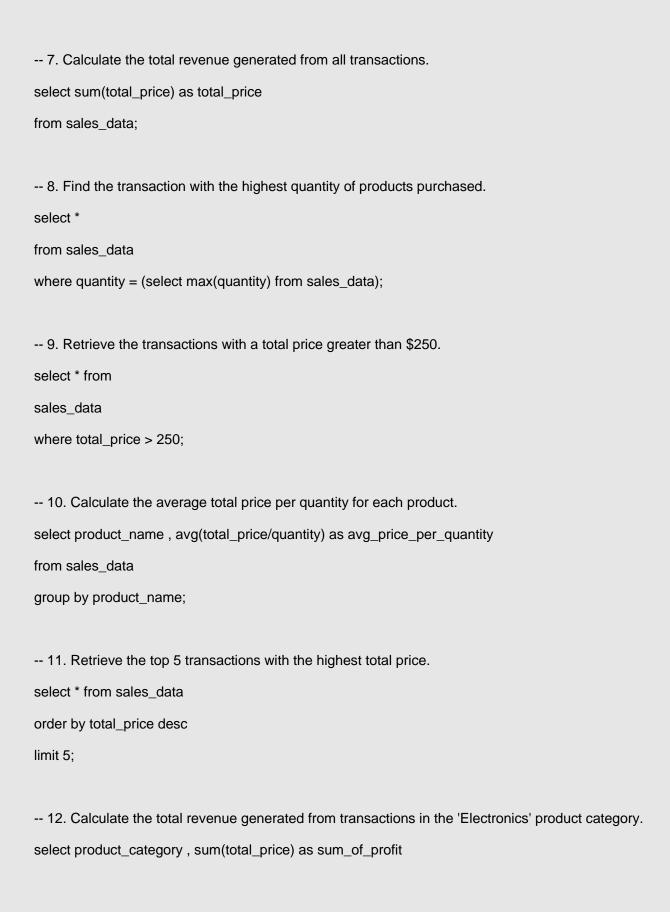
20 BASIC SQL FUNCTION

-- 1. Retrieve all columns for all transactions in the table. select * from sales data; -- 2. Calculate the total quantity sold across all transactions. select sum(quantity) as sum_of_quantity from sales_data; -- 3. Calculate the average unit price of products sold. select avg(unit_price) as avg_unitprice from sales_data; -- 4. Find the maximum total price among all transactions. select max(total_price) as "maximum total price" from sales_data; -- 5. Retrieve the transactions where the product category is 'Electronics' select * from sales_data where product_category = 'Electronics'; -- 6. Count the number of transactions for each product category. select product_category ,count(*) as "number of transactions" from sales_data group by product_category;



```
from sales data
where product_category = 'Electronics';
-- 13. Find the average unit price of products sold in transactions with a quantity greater than 5.
select avg(unit_price)
from sales_data
where quantity > 5;
-- 14. Retrieve the transactions where the total price is within the range of $100 to $500.
select * from sales_data
where total_price between 100 and 500;
-- 15. Find the average quantity of products purchased per transaction.
select avg(quantity)as avg_qunatiyty
from sales_data;
-- 16. Retrieve the transactions where the product name contains the word 'Sneakers'.
select * from
sales_data
where product_name like 'Sneakers';
-- 17. Identify the product category with the highest total revenue.
select product_category , sum(total_price) as higest_total_revenue
from sales_data
group by product_category
order by sum(total_price) desc
limit 1;
```

18. Calculate the average total price per quantity for transactions in the 'Apparel' product category.
select product_category , avg(total_price/unit_price) as "average total price per quantity"
from sales_data
where product_category = 'Apparel';
19. Retrieve the top 3 transactions with the highest quantity of products purchased.
select * from sales_data
order by quantity desc
limit 3;
20. Retrieve the transactions where the unit price is higher than the average unit price of all transactions.
select * from
sales_data
where unit_price > (select avg(unit_price) from sales_data);