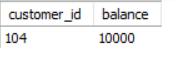
**TASKS 5: SUBQUERY**

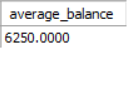
1. *Retrieve the customer(s) with the highest account balance.*

select customer\_id,balance from accounts where balance= (select max(balance)from accounts);



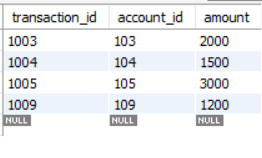
*2. Calculate the average account balance for customers who have more than one account.*

select avg(balance) AS average\_balance from Accounts where customer\_id in (select customer\_id from Accounts group by customer\_id having count(\*) > 1) group by customer\_id;



*3. Retrieve accounts with transactions whose amounts exceed the average transaction amount.*

select transaction\_id, account\_id,amount from transactions where amount > All (select avg(amount) from transactions);

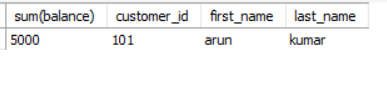


*4. Identify customers who have no recorded transactions.*

select customer\_id from Customers where customer\_id not in ( select distinct customer\_id from Transactions);

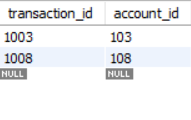


*5. Calculate the total balance of accounts with no recorded transactions.*

select sum(balance), c.customer\_id, c.first\_name, c.last\_name from Customers c left join Accounts a on c.customer\_id = a.customer\_id left join Transactions t on a.account\_id = t.account\_id where t.transaction\_id is null group by c.customer\_id, c.first\_name, c.last\_name;

*6. Retrieve transactions for accounts with the lowest balance.*

select transaction\_id,account\_id from Transactions where account\_id in (select account\_id from Accounts where balance = (select min(balance) from Accounts));



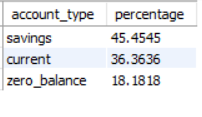
*7. Identify customers who have accounts of multiple types.*

select customer\_id from accounts where account\_type in ( select count(\*) from accounts group by account\_type having account\_type< 1);



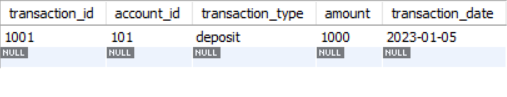
*8. Calculate the percentage of each account type out of the total number of accounts.*

select account\_type, count(\*) \* 100 / (select count(\*) from Accounts) as percentage from Accounts group by account\_type;



*9. Retrieve all transactions for a customer with a given customer\_id.*

select \* from transactions where account\_id in (select account\_id from accounts where customer\_id=(select customer\_id from customers where customer\_id=101));



*10. Calculate the total balance for each account type, including a subquery within the SELECT*

*clause.*

select account\_type,(select SUM(balance) from Accounts where account\_type = a.account\_type)

as total\_balance from Accounts a group by account\_type;

