**Task 4**

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

**SELECT c.customer\_id,**

**c.first\_name,**

**c.last\_name,**

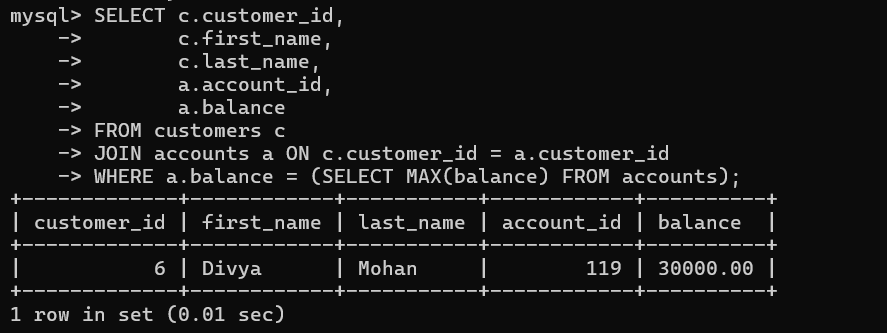
**a.account\_id,**

**a.balance**

**FROM customers c**

**JOIN accounts a ON c.customer\_id = a.customer\_id**

**WHERE a.balance = (SELECT MAX(balance) FROM accounts );**



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

**select customer\_id,avg(balance)**

**from accounts**

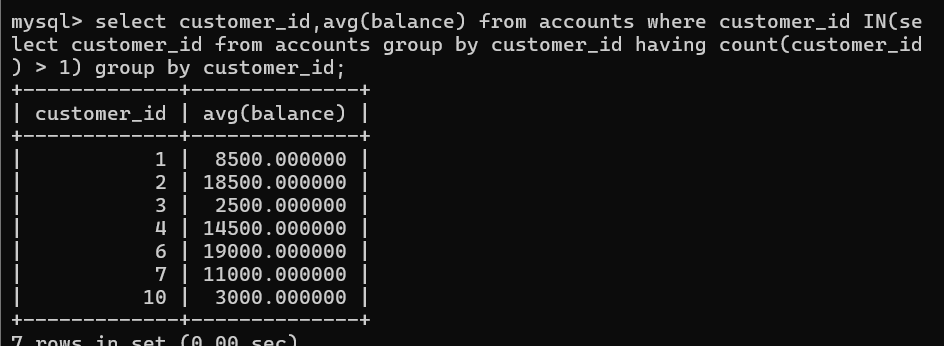
**where customer\_id IN (select customer\_id**

**from accounts**

**group by customer\_id**

**having count(customer\_id) > 1)**

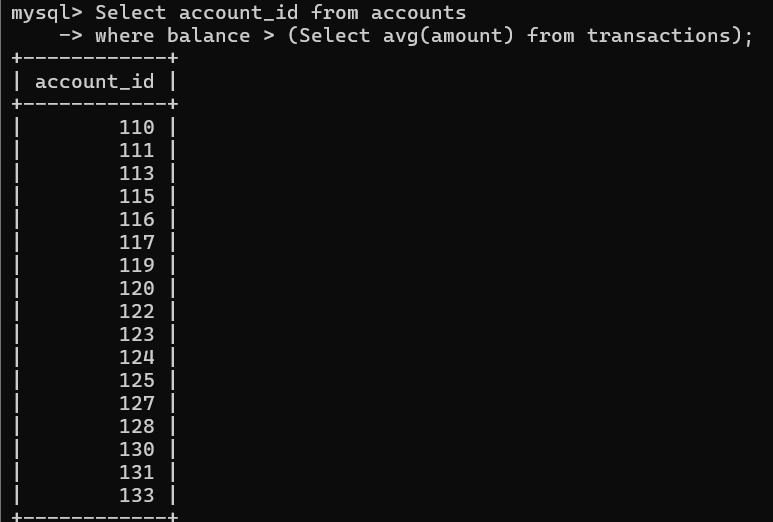
**Group by customer\_id;**



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

**Select account\_id from accounts**

**where balance > (Select avg(amount) from transactions);**



4. Identify customers who have no recorded transactions.

**Select c.customer\_id,**

**c.first\_name,**

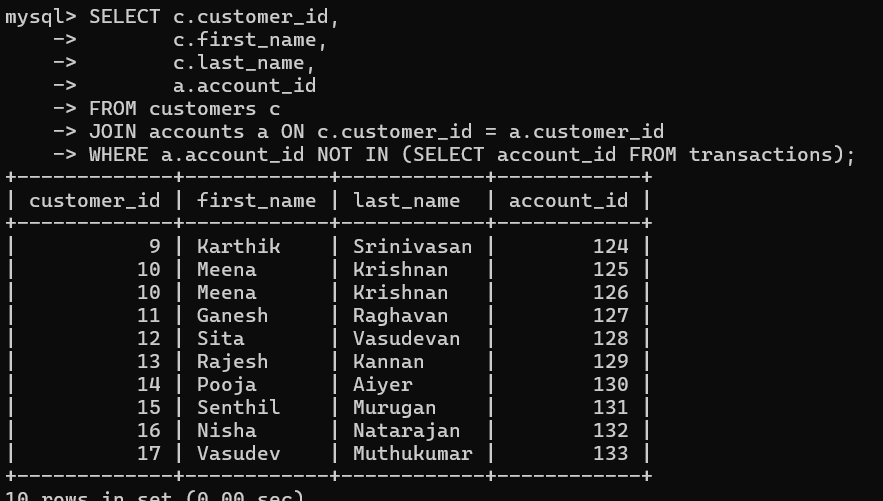
**c.last\_name,**

**a.account\_id**

**From customers c**

**Join accounts a ON c.customer\_id = a.customer\_id**

**Where a.account\_id NOT IN (Select account\_id From transactions);**

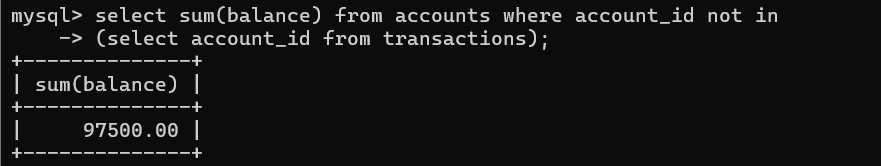
****

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

**select sum(balance) from accounts**

**where account\_id not in**

**(select account\_id from transactions);**



6. Retrieve transactions for accounts with the lowest balance.

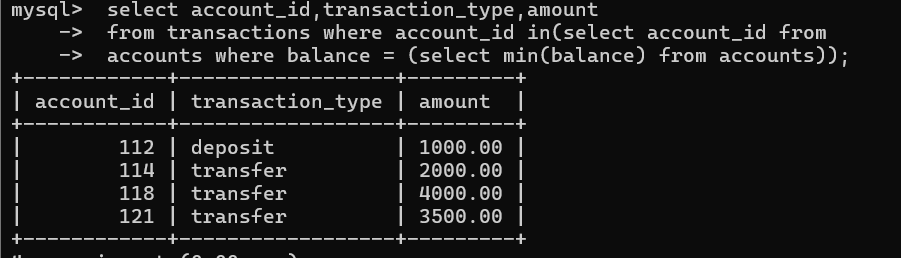
**select account\_id,transaction\_type,amount**

**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 c.customer\_id, c.first\_name, c.last\_name**

**From customers c**

**Join accounts a ON c.customer\_id = a.customer\_id**

**Where c.customer\_id IN (**

**Select customer\_id**

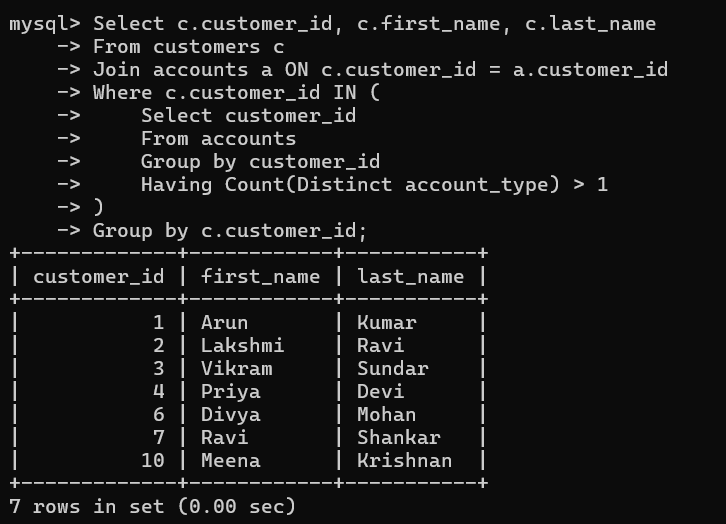
**From accounts**

**Group by customer\_id**

**Having Count(Distinct account\_type) > 1**

**)**

**Group by c.customer\_id;**



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

**select account\_type,**

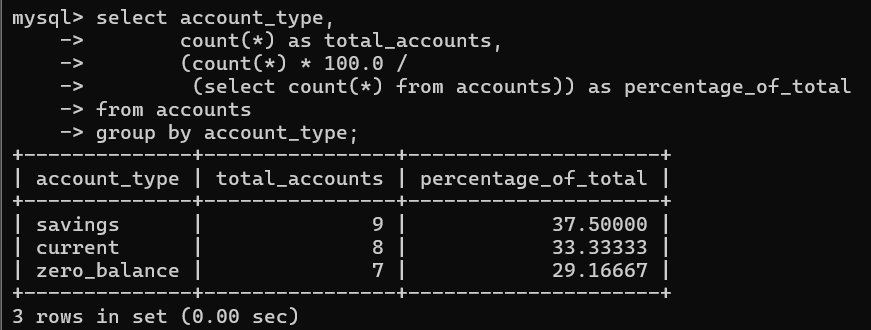
**count(\*) as total\_accounts,**

**(count(\*) \* 100.0 /**

**(select count(\*) from accounts)) as percentage\_of\_total**

**from accounts**

**group by account\_type;**

****

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

**Select t.account\_id,**

**t.transaction\_id,**

**t.transaction\_type,**

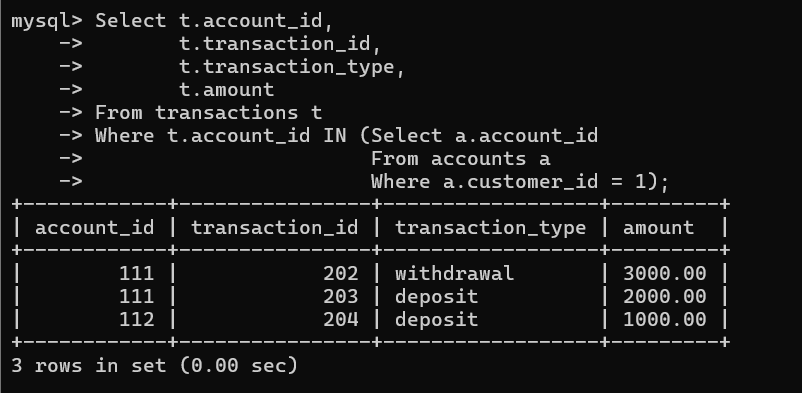
**t.amount**

**From transactions t**

**Where t.account\_id IN (Select a.account\_id**

**From accounts a**

**Where a.customer\_id = 1);**

****

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

**select a.account\_type,(select sum(a2.balance) from accounts a2**

**where a2.account\_type=a.account\_type) as Total\_balance**

**from accounts a**

**group by account\_type;**

