Task: Create a sequence diagram based on the provided pseudocode

Money transfer use case - main flow of events

- 1. Client selects option in the menu to transfer money to another account.
- 2. System displays form for input information about the transfer
- 3. Client fills the money amount, recipient account number and description.
- 2. System searches for client's and recipient's accounts.
- 3. System checks whether Client is the owner of the account
- 4. System checks whether client's account has sufficient balance.
- 5. IF the balance is sufficient
 - 5.1. System creates a new transaction.
 - 5.2. System updates the balance in both accounts by executing the transaction.
 - 5.3 System notifies both clients about the transaction.

Design class diagram

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Pseudocode

Note: indentation represents the location where the code is executed, for example findClient() and notif.send() are called inside of the createMoneyTransfer() and clientAcc.withdraw() is called within the execute() method;

```
foreach (Client c in clients){
```

cId = c.getId()

if (cId == clientID)

return c;

break;

return null;

clientAcc = AccountManager.findAccount(accountNumberSender);

receiverAcc = AccountManager.findAccount(accountNumberReceiver);

```
if (client.hasAccount(clientAcc)){
```

balance = clientAcc.getBalance();

if (balance >= amount)

t = new Transaction (clientAcc, receiverAcc, amount, message);

t. execute()

clientAcc.withdraw(amount);

receiverAcc.deposit(amount);

```
receiverClient = ClientManager.findClientForAccount(receiverAcc);
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```
notif = NotificationManager.createNotification(t);
```

```
m = t.getMessage();
a = t.getAmount();
notif = new Notification(m, a);
return notif;
```

notif.send(client);

notif.send(receiverUser);