1) Classes

"who Paid"

"who Had to Pay"

User
- id
- name
- email
- List<User> friends
- List<group> groups
- password

Group
- id
- name
- List<User> members
- User createdBy
- Date createdDate
- List<Expense> expenses
- Int totalAmountSpent
- List<Transaction> setUp transactions

Expense
- id
- description
- amount
- date of Expense
- User added by
- currency

— List<UserExpense> userExpenses;

Expense 1 =>

who paid ⇒ [{A = 1000} {B = 1000}]

who had to ⇒ [{A = 500} {B = 500} {C = 500} {D = 500}]

class UserExpense {

    User user;

    double amount;

    UserExpenseType → paid

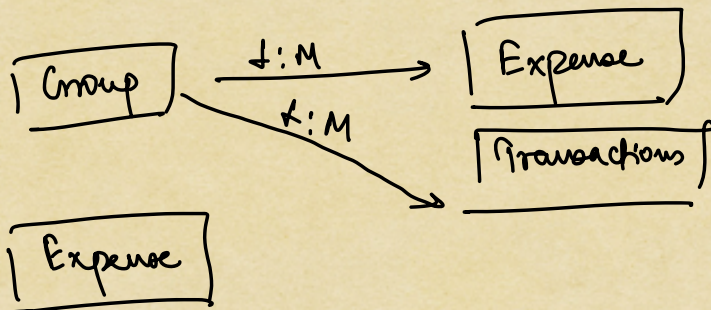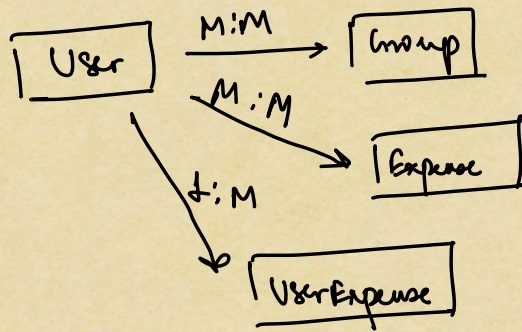   → hadToPay

}

Transaction {

    User borrower

    User lender;

    double amount;

}

              → amount

      (500)

  A ——→ B

  ↓   ↓

 borrower lender

User →(M:M)→ Group

User →(M:M)→ Expense

User →(1:M)→ UserExpense

Group →(1:M)→ Expense

Group →(1:M)→ Transactions
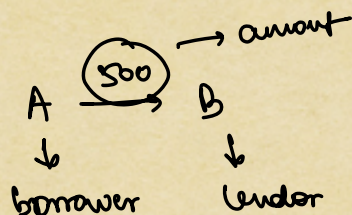
Expense

UserExpense

Transactions
↓
SettleTransactions

Break => 10:10 PM

* audit columns ⟶ timestamps [createdAt, updatedAt]

* mapping => 1 way
          2 way] mapping.