Problem 1. [100pts] Consider the following schema of a bank:

```sql
customer (name: string, credit: integer)
loan (no: string, type: string, minCredit: integer)
borrower (cname: string, lno: string, due: date)
```

where borrower.cname and borrower.lno are foreign keys referencing customer, respectively loan, whose keys are name, respectively no (number). Attribute loan.minCredit indicates the minimum credit required of a customer to qualify for that loan.

Write the following queries in SQL.

1. (10 pts): Find the names of customers who took a “jumbo mortgage” loan.
2. (10 pts): Find the names of customers who took a “jumbo mortgage” loan or have a credit rating of at least 750.
3. (10 pts): Find the names of customers who took a “jumbo mortgage” loan and a “student” loan.
4. (10 pts): Find the names of customers who took every loan.
5. (10 pts): Find the names of customers who took every “jumbo mortgage” or “student” loan.
6. (10 pts): Find the names of customers who took every “jumbo mortgage” loan or took every “student” loan.
7. (10 pts): Find pairs of names of customers who share the same loan. Avoid listing a customer with himself (e.g. do not list (Joe, Joe)). Also avoid repeating pairs which are equal modulo swapping the components (e.g. only one of (John, Jane), (Jane, John) should be listed).
8. (10 pts): Find the loan numbers (no) shared by at least two different customers.
9. (10 pts): Find the numbers for the loans with highest minCredit requirement among the loans taken by a borrower named “Smith”.
10. (10 pts): Find the loan numbers shared by every customer with a credit rating below 600.

Do not use grouping and aggregation in solving questions 4, 5, 6 and 10!