4.15

select c.building,c.room\_number,course\_id,sec\_id,semester,year,time\_slot\_id,capacity

from section join classroom c

USING (building, room\_number);

5.15

-- 编写函数，以公司名作为参数，查找该公司平均工资

create function avg\_salary(company\_name varchar(20))

    returns real

    begin

        declare ans real;

        select avg(salary) into ans

        from works

        where works.company\_name = company\_name;

        return ans;

    end;

-- 找出员工平均工资高于'First Bank'的公司

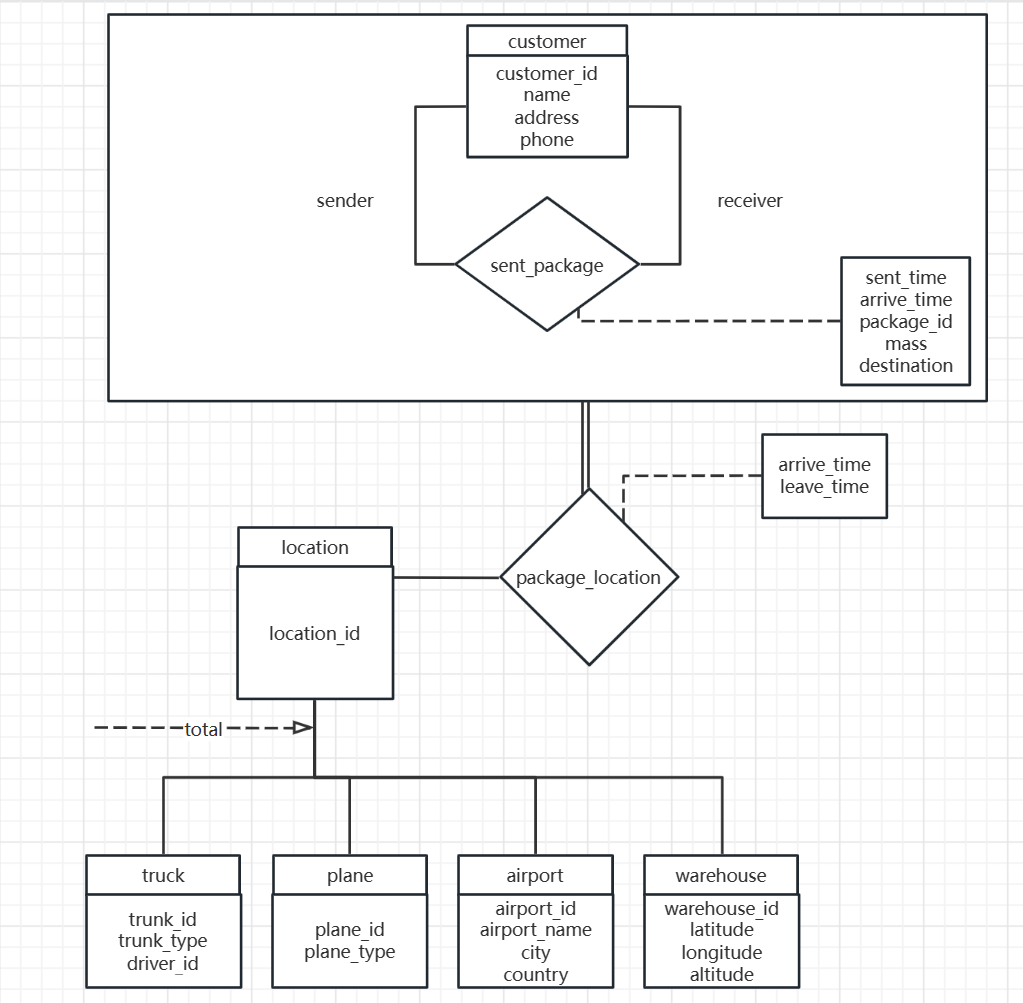
select company\_name

from works

group by company\_name

having avg\_salary(salary) > avg\_salary('First Bank');

6.23



customer(customer\_id, name, address, phone)

sent\_package(package\_id, sender\_id, receiver\_id, sent\_time, arrive\_time, mass, destination)

package\_location(location\_id, package\_id, arrive\_time, leave\_time)

location(location\_id)

truck(location\_id, truck\_id, truck\_type, driver\_id)

plane(location\_id, plane\_id, plane\_type)

airport(location\_id, airport\_id, airport\_name, city, country)

warehouse(location\_id, warehouse\_id, latitude, longitude, altitude)

主码：

上述关系模式中，主码均用下划线表示

外码：

sent\_package中sender\_id, receiver\_id引用customer中的customer\_id

package\_location 中location\_id引用location中的location\_id

truck, plane, airport, warehouse中的location\_id引用location中的location\_id

其他约束

sent\_package中的sender\_id, receiver\_id, mass, destination非空

7.26

|  |  |  |
| --- | --- | --- |
| α | β | γ |
| 1 | 2 | 4 |
| 1 | 2 | 8 |
| 2 | 3 | 10 |

此时，α-> β，γ->β，但α的值1映射到了两个不同的γ值，分别为4、8，因此不满足α->γ

7.27

已知α->βγ

求证α->β且α->γ

∵β⊆βγ

∴βγ->β(自反律)

∴α->β(传递律)

同理

α->γ