Lab 5 (database)

```
1. create database lab4;
```

```
2. create table Warehouses (
    code integer primary key,
    location varchar(255),
    capacity integer
);
```

```
 create table Boxes (
    code char(4) primary key,
    contents varchar(255),
    value real,
    warehouse integer,
    foreign key (warehouse) references Warehouses(code)
);
```

3. done

```
4. select * from Warehouses;
```

	code	location	capacity
1	1	Chicago	3
2	2	Rocks	4
3	3	New York	7
4	4	Los Angeles	2
5	5	San Francisko	8

```
5. select *
from boxes
where value > 150;
```

	code	contents	value	warehouse
1	0MN7	Rocks	180	3
2	4H8P	Rocks	250	1
3	4RT3	Scissors	190	4
4	7G3H	Rocks	200	1
5	9J6F	Papers	175	2

```
6. select distinct on (contents) *
from boxes;
```

	code	contents	value	warehouse
1	TUSS	Papers	90	5
2	LL08	Rocks	140	4
3	P2T6	Scissors	150	2

```
7. select warehouse, value
from boxes
group by (warehouse, value);
```

	warehouse	value
1	1	250
2	1	125
3	3	180
4	1	200
5	2	150
6	5	90
7	2	175
8	1	75
9	4	190
10	3	50
11	4	140

```
7. select warehouse, count(value)
from boxes
group by (warehouse);
```

	warehouse	count
1	3	2
2	5	1
3	4	2
4	2	2
5	1	4

```
8. select warehouse, value
from boxes
group by (warehouse, value)
having warehouse > 2;
```

	warehouse	value
1	5	90
2	3	180
3	3	50
4	4	140
5	4	190

```
8. select warehouse, count(value)
from boxes
group by (warehouse, value)
having warehouse > 2;
```

	warehouse	count
1	5	1
2	3	1
3	3	1
4	4	1
5	4	1

```
9. insert into warehouses (code, location, capacity)
values (6, 'New York', 3);
```

	code	location	capacity
1	1	Chicago	3
2	2	Rocks	4
3	3	New York	7
4	4	Los Angeles	2
5	5	San Francisko	8
6	6	New York	3

```
10. insert into boxes (code, contents, value, warehouse)
values ('H5RT', 'Papers', 200, 2);
```

	code	contents	value	warehouse
1	0MN7	Rocks	180	3
2	4H8P	Rocks	250	1
3	4RT3	Scissors	190	4
4	7G3H	Rocks	200	1
5	8JN6	Papers	75	1
6	8Y6U	Papers	50	3
7	9J6F	Papers	175	2
8	LL08	Rocks	140	4
9	P0H6	Scissors	125	1
10	P2T6	Scissors	150	2
11	TUSS	Papers	90	5
12	H5RT	Papers	200	2

```
11. update boxes
set value = value * 0.85
where value = (select value from boxes order by value desc limit 1 offset 2);
```

	code	contents	value	warehouse
1	4H8P	Rocks	250	1
2	H5RT	Papers	200	2
3	7G3H	Rocks	200	1
4	4RT3	Scissors	190	4
5	0MN7	Rocks	180	3
6	9J6F	Papers	175	2
7	P2T6	Scissors	150	2
8	LL08	Rocks	140	4
9	P0H6	Scissors	125	1
10	TUSS	Papers	90	5
11	8JN6	Papers	75	1
12	8Y6U	Papers	50	3

	code	contents	value	warehouse
1	4H8P	Rocks	250	1
2	4RT3	Scissors	190	4
3	0MN7	Rocks	180	3
4	9J6F	Papers	175	2
5	H5RT	Papers	170	2
6	7G3H	Rocks	170	1
7	P2T6	Scissors	150	2
8	LL08	Rocks	140	4
9	P0H6	Scissors	125	1
10	TUSS	Papers	90	5
11	8JN6	Papers	75	1
12	8Y6U	Papers	50	3

```
11. update boxes
set value = value * 0.85
where value = (select distinct (value) from boxes order by value desc limit 1
offset 2);
```

	code	contents	value	warehouse
1	4H8P	Rocks	250	1
2	7G3H	Rocks	200	1
3	H5RT	Papers	200	2
4	0MN7	Rocks	180	3
5	9J6F	Papers	175	2
6	4RT3	Scissors	161.5	4
7	P2T6	Scissors	150	2
8	LL08	Rocks	140	4
9	P0H6	Scissors	125	1
10	TUSS	Papers	90	5
11	8JN6	Papers	75	1
12	8Y6U	Papers	50	3

```
12. delete
from boxes
where value < 150;
```

	code	contents	value	warehouse
1	0MN7	Rocks	180	3
2	4H8P	Rocks	250	1
3	7G3H	Rocks	200	1
4	9J6F	Papers	175	2
5	P2T6	Scissors	150	2
6	H5RT	Papers	200	2
7	4RT3	Scissors	161.5	4

```
13. delete
from boxes
where warehouse in (select code from warehouses where location = 'New York');
```

	code	contents	value	warehouse
1	4H8P	Rocks	250	1
2	7G3H	Rocks	200	1
3	9J6F	Papers	175	2
4	P2T6	Scissors	150	2
5	H5RT	Papers	200	2
6	4RT3	Scissors	161.5	4

	code	location	capacity
1	1	Chicago	3
2	2	Rocks	4
3	3	New York	7
4	4	Los Angeles	2
5	5	San Francisko	8
6	6	New York	3