练习

1.查询产品价格大于100元的产品信息

$\pi_{price>100}(product)$

```
SELECT *
FROM Product
WHERE price > 100;
```

2.查询产品价格在100-200元之间的产品名称和价格

```
SELECT prod_id,price
FROM Product
WHERE price BETWEEN 100 AND 200;
```

3.查询所有不是供应商DLL01制造的商品

```
SELECT *
FROM product
WHERE vend_id!='DLL01';
```

4.查询供应商为DLL01和BRS01的产品名称和价格

```
SELECT prod_id,price
FROM Product
WHERE vend_id='DLL01'OR'BRS01';
```

5.查询学号为201215121的学生的信息

```
SELECT *
FROM Student
WHERE sno Like '201215121';
```

6.查询所有姓刘的学生

```
SELECT *
FROM Student
WHERE sno Like '刘%';
```

7.查询姓欧阳且只有三个字的学生信息

```
SELECT *
FROM Student
WHERE sno Like '欧阳_';
```

8.查询DB_Design的课程的课程好和学生

```
SELECT Cno,Ccredit
FROM course
WHERE Cname LIKE 'DB\_Design' ESCAPE '\ ';
```

9.查询所有以Fish开头命名的产品的编号名称价格

```
SELECT prod_id,name,price
```

```
FROM Product
WHERE name LIKE 'Fish%';
```

10.查询所有以Teddy开头，以r结尾的9个字符的产品的编号名称价格

```
SELECT prod_id,name,price
FROM Product
WHERE name LIKE 'Teddy___r';
```

11.查询product表中商品价格为空值的产品名称

```
SELECT name
FROM Product
WHERE price IS NULL;
```

12.查询供应商编号为DLL01和BRS01的产品名称和价格

```
SELECT name,price
FROM Product
WHERE vend_id = 'DLL01' AND 'BRS01';
```

13.查询供应商编号为DLL01的产品编号，i名称和价格，并按产品编号升序排序

```
SELECT prod_id,name,price
FROM Product
WHERE vend_id ='DLL01'
ORDER BY prod_id asc;
```

14.前几名或后几名的形式

```
SELECT TOP 10 sno
FROM Student
WHERE sname LIKE '刘%'
```

聚集函数

- 统计元组个数 `COUNT(*)`
- 统计一列中值（非空）的个数 `COUNT([DISTINCT|ALL]) <列名>`
- 计算一列值的总和 `SUM([DISTINCT|ALL]) <列名>`
- 计算一列的最大值 `MAX([DISTINCT|ALL]) <列名>`
- 计算一列的平均值 `AVG([DISTINCT|ALL]) <列名>`
- `COUNT([DISTINCT|ALL]) <列名>`

15.查询所有最贵产品的价格

```
SELECT MAX(price)
FROM Product
```

16.查询所有产品的平均价格

```
SELECT AVG(price)
FROM PRoduct
```

GROUP BY 字句

如果有GROUPBY字句，则SELECT后的字段列表或者聚集函数，或者必须出现在GROUPBY列表中。 17.查询选修了三门以上课程的学生学号

```
SELECT Sno
FROM SC
GROUP BY Sno
WHERE HAVING COUNT(*)>3;
```

18.查询每个供应商提供的产品种类数

```
SELECT COUNT(name)
FROM Product
GROUP BY vend_id;
```

19.查询有两个以上订单的顾客编号和订单数量

```
SELECT cust_id,COUNT(*)
FROM Order
GROUP BY cust_id
HAVING COUNT(*)>1
```