

Lab 1: Parts III and IV

Part III

Simple Queries

1. List SNO for suppliers in Paris (City's value equals to 'Paris') with a status ≥ 30 .

```
SELECT SNO FROM supplier
WHERE CITY = 'Paris' AND STATUS >= 30;
```

2. List SNO and STATUS for suppliers in Paris, in descending order of STATUS.

```
SELECT SNO, STATUS FROM supplier
WHERE CITY = 'Paris'
ORDER BY STATUS DESC;
```

3. List all the SNOs in table SP without duplication.

```
SELECT DISTINCT SNO FROM shipment;
```

4. List all columns about suppliers and parts if supplier's city is the same as part's stored city.

```
SELECT * FROM supplier, parts
WHERE supplier.CITY = parts.STORECITY;
```

5. Count the number of parts shipped by suppliers S4.

```
SELECT COUNT(PNO) FROM shipment
WHERE SNO = 'S4';
```

Part IV

More Complex Queries

1. List SNO for all suppliers who ship more than one part.

```
SELECT SNO FROM shipment
GROUP BY SNO HAVING COUNT(SNO) > 1;
```

2. List supplier names for suppliers who supply at least one red part.

```
SELECT DISTINCT SNAME FROM supplier AS S
JOIN shipment AS SP ON S.SNO = SP.SNO
JOIN parts AS P ON SP.PNO = P.PNO
WHERE P.COLOR = 'RED';
```

3. List supplier names for suppliers who do not supply part P2.

```
SELECT SNAME FROM supplier
WHERE SNO NOT IN (SELECT SNO FROM shipment WHERE PNO = 'P2');
```

4. For each part shipped, get its PNO and the total shipment quantity of the PNO from all suppliers.

```
SELECT PNO, SUM(QTY)
FROM shipment
GROUP BY PNO;
```

5. List part numbers and suppliers' names for any part shipped by more than one supplier.

```
SELECT PNO, SNAME FROM supplier AS S
JOIN shipment AS SP ON S.SNO = SP.SNO
```

```
WHERE PNO IN (SELECT PNO FROM shipment GROUP BY PNO HAVING COUNT(*) > 1);
```