

1. SQL File

```
1 -- Create the tables
2 CREATE TABLE NhanVien(
3     NhanVienID INTEGER PRIMARY KEY,
4     Ten TEXT,
5     Ho TEXT,
6     PhongID INTEGER,
7     Luong INTEGER
8 );
9
10 CREATE TABLE Phong(
11     PhongID INTEGER PRIMARY KEY,
12     TenPhong TEXT
13 );
14
15 -- Insert data into the tables
16 INSERT INTO Phong (PhongID, TenPhong) VALUES
17 (1, 'Sales'),
18 (2, 'Marketing'),
19 (3, 'IT'),
20 (4, 'HR');
21
22 INSERT INTO NhanVien VALUES
23 (1, 'Quan', 'Nguyen Hoang', 1, 4385),
24 (2, 'Chien', 'Tran Van', 2, 6000),
25 (3, 'Minh', 'Vu Van', 1, 4500),
26 (4, 'Dung', 'Hoang Thi', 3, 7500),
27 (5, 'Trung', 'Phan Van', 4, 3000),
28 (6, 'Giang', 'Tran Thi', 2, 4000),
29 (7, 'Hoang', 'Vu Van', 3, 2600),
30 (8, 'Minh', 'Hoang Van', 4, 9999),
31 (9, 'Hung', 'Nguyen Manh', 1, 8888),
32 (10, 'Phu', 'Hoang Van', 1, 7242);
```

2. Select All information from the NhanVien table

```
1 SELECT * FROM NhanVien
```

NhanVienID	Ten	Ho	PhongID	Luong
1	Quan	Nguyen Hoang	1	4385
2	Chien	Tran Van	2	6000
3	Minh	Vu Van	1	4500
4	Dung	Hoang Thi	3	7500
5	Trung	Phan Van	4	3000
6	Giang	Tran Thi	2	4000
7	Hoang	Vu Van	3	2600
8	Minh	Hoang Van	4	9999
9	Hung	Nguyen Manh	1	8888
10	Phu	Hoang Van	1	7242

3. Select the Ten, Ho and Phong columns from the NhanVien table

```
1 SELECT Ten, Ho, PhongID FROM NhanVien
```

Ten	Ho	PhongID
Quan	Nguyen Hoang	1
Chien	Tran Van	2
Minh	Vu Van	1
Dung	Hoang Thi	3
Trung	Phan Van	4
Giang	Tran Thi	2
Hoang	Vu Van	3
Minh	Hoang Van	4
Hung	Nguyen Manh	1
Phu	Hoang Van	1

4. Filter data using the WHERE clause

Select all NhanVien who work in the Sales department.

```
1 SELECT * FROM NhanVien WHERE PhongID = 1
```

NhanVienID	Ten	Ho	PhongID	Luong
1	Quan	Nguyen Hoang	1	4385
3	Minh	Vu Van	1	4500
9	Hung	Nguyen Manh	1	8888
10	Phu	Hoang Van	1	7242

5. Sort query results:

Select all employees and sort them by Ten in ascending order

```
1 SELECT * FROM NhanVien ORDER BY Ten ASC
```

NhanVienID	Ten	Ho	PhongID	Luong
2	Chien	Tran Van	2	6000
4	Dung	Hoang Thi	3	7500
6	Giang	Tran Thi	2	4000
7	Hoang	Vu Van	3	2600
9	Hung	Nguyen Manh	1	8888
3	Minh	Vu Van	1	4500
8	Minh	Hoang Van	4	9999
10	Phu	Hoang Van	1	7242
1	Quan	Nguyen Hoang	1	4385
5	Trung	Phan Van	4	3000

6. Use the COUNT aggregate function:

Count the number of employees in each department.

```
1 SELECT COUNT(PhongID) FROM NhanVien WHERE PhongID = 1
```

```
⋮ COUNT(PhongID)
```

```
4
```

```
1 SELECT COUNT(PhongID) FROM NhanVien WHERE PhongID = 2
```

```
⋮ COUNT(PhongID)
```

```
2
```

```
1 SELECT COUNT(PhongID) FROM NhanVien WHERE PhongID = 3
```

```
⋮ COUNT(PhongID)
```

```
2
```

```
1 SELECT COUNT(PhongID) FROM NhanVien WHERE PhongID = 4
```

```
⋮ COUNT(PhongID)
```

```
2
```