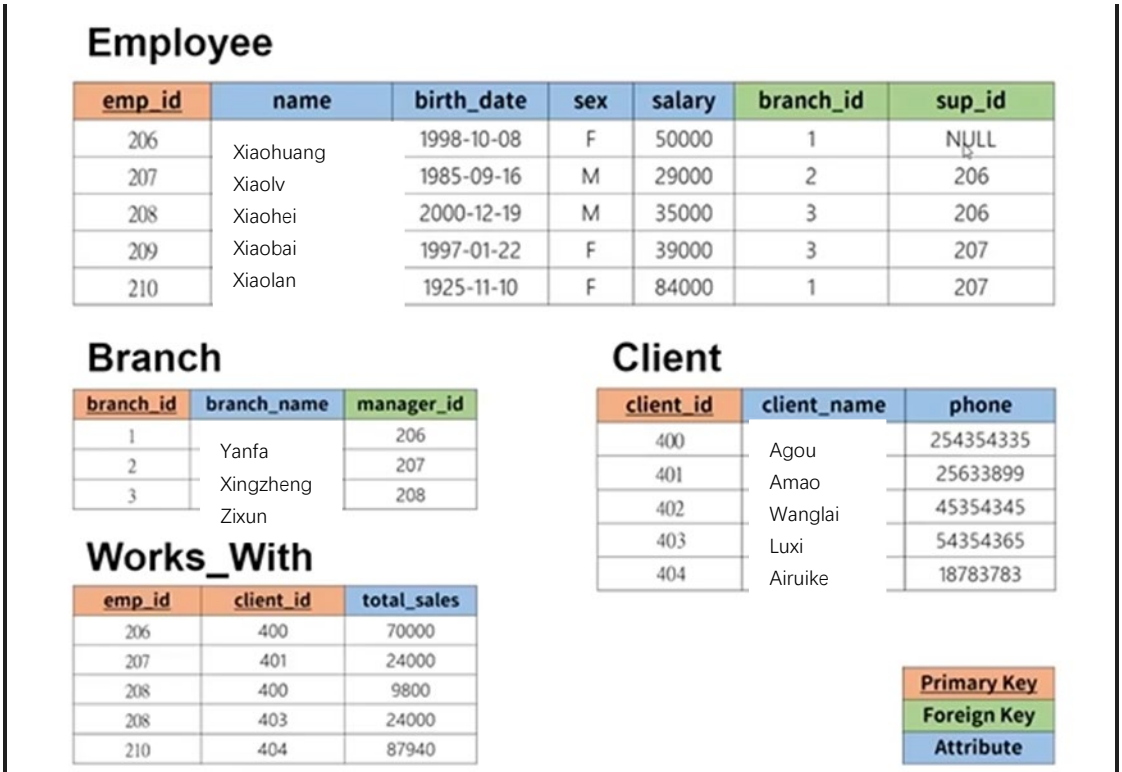


```
#in this document, we have 6 questions.By solving these questions, you will learn how to easily create tables and retrieve data
#(1)creat tables from the figure
#(2) Obtain and show all employees information
#(3)Sort salaries from high to low and display the top three employees in terms of salary
#(4)show all employees name
```

```
(1)
create database `foreign key test`;
use `foreign key test`;
#先创建表格   构建 employee 表格   create table
create table `employee`(
`emp_id` int primary key,
`name` varchar(20),
`birth_date` date,
`sex` varchar(1),
`salary` decimal(10,1),
`branch_id` int,
`sup_id` int
);
create table `branch`(
`branch_id` int primary key,
`branch_name` varchar(5),
`manager_id` int,
foreign key (`manager_id`) references
`employee`(`emp_id`) on delete set null
```

```
);
#insert foreign key
alter table `employee`
add foreign key(`branch_id`)
references `branch`(`branch_id`)
on delete set null;
alter table `employee`
add foreign key(`sup_id`)
references `employee`(`emp_id`)
on delete set null;

create table `client`(
`client_id` int primary key,
`client_name` varchar(10),
`phone` int
);
#create works_with, be carefull of double
primary keys
create table `works_with`(
`emp_id` int ,
`client_id` int,
`total_sales` int,
```

```
primary key (`emp_id`,`client_id`),
foreign key(`emp_id`) references
`employee`(`emp_id`) on delete cascade,
foreign key(`client_id`)references
`client`(`client_id`)on delete cascade
);
#use drop to delete table
drop table`works_with`;
drop table `client`;
drop table `branch`;
drop table `employee`;
#use decribe to check the table
describe `employee`;

# now insert information into table,if you
first insert infor into empolyee or branch,
sql will #report error because of foreign
key. so, let us finish branch table and use
null to alter emp_id.
insert into `branch` values(1,"keyan",null);
insert into `branch`values(2,"hayan",null);
insert into `branch`values(3,"zixun",null);
```

```
UPDATE `foreign key test`.`branch` SET
`manager_id` = '208' WHERE (`branch_id` =
'3');#if you make mistake use this code to
update
select*from `branch`;# check the branch table
#insert information into employee
insert into `employee`(`emp_id`,`name`)
values(206,"xiaohuang");
insert into `employee`
values(206,"xiaohuang",'1998-10-
08',"F",50000, 1, null);
insert into `employee`
values(207,"xiaolv",'1985-09-
16',"M",29000,2,206);
insert into
`employee`values(208,"xiaohei",'2000-12-
19',"M",35000,3,206);
insert into `employee`
values(209,"xiaobai",'1997-01-
22',"F",39000,3,207);
```

```
insert into `employee`
values(210,"xiaolan",'1925-11-
10',"F",84000,1,207);
select * from `employee`;
#UPDATE `foreign key test`.`employee` SET
`sup_id` = '207' WHERE (`emp_id` = '209');

#into client and works_with
insert into `client`
values(400,"agou",25435335);
insert into `client`
values(401,"amao",256399);
insert into `client`
values(402,"wanglai",45354345);
insert into `client`
values(403,"luxi",54354365);
insert into `client`
values(404,"airuike",18783783);
select * from `client`;

insert into `works_with`
values(206,400,70000);
```

```
insert into `works_with`
values(207,401,24000);
insert into `works_with`
values(208,402,9800);
insert into `works_with`
values(209,403,24000);
insert into `works_with`
values(210,404,87940);
select * from `works_with`;



(2)
select * from `employee` order by `salary`
desc limit 3;
(3)
select `name` from `employee` ;
#by the way, if you wanna show sex of
employees, use distinct to advoid repetition
select distinct `sex` from `employee`;
```