```
create database Assignments2
use Assignments2
create table Departments1
  (

    create table Departments1(Dept_no int,Dept_name varchar(20),location varchar(20))
    insert into Departments1 values(1,'Research','Dallas')
    insert into Departments1 values(2,'Accounting','Seattle')
    insert into Departments1 values(3,'Marketing','Dallas')
)

 --Employee table
create table Employee(emp_no int,emp_fname varchar(20),emp_lname varchar(20),dept_no int)
insert into Employee values(25348,'Matthew','Smith',3)
insert into Employee values(10102,'Ann','Jones',3)
insert into Employee values(18316,'John','Barrimore',1)
insert into Employee values(29346,'James','James',2)

--Project table
create table Project(project_no varchar(5),project_name varchar(20),Budget varchar(20))
insert into Project values('p1','Apollo',120000)
insert into Project values('p2','Gemini',95000)
insert into Project values('p3','Mercury',185600)

--Works_on table
create table Works_on(emp_no int,project_no varchar(5),Job varchar(20),enter_date DateTime)
insert into Works_on values(10102,'p1','Analyst','1997.10.1')
insert into Works_on values(10102,'p3','manager','1999.1.1')
insert into Works_on values(25348,'p2','Clerk','1998.2.15')
```

```
insert into Works_on values(18316,'p2',NULL,'1998.6.1')
insert into Works_on values(29346,'p2',NULL,'1997.12.15')
insert into Works_on values(2581,'p3','Analyst','1998.10.15')
insert into Works_on values(9031,'p1','manager','1998.4.15')
insert into Works_on values(28559,'p1',NULL,'1998.8.1')
insert into Works_on values(28559,'p2','Clerk','1992.2.1')
insert into Works_on values(9031,'p3','Clerk','1997.11.15')
insert into Works_on values(29346,'p1','Clerk','1998.1.4')

---1 works_on
select*from Works_on

--2 employee num for all clerks

select emp_no from Works_on where Works_on.Job='Clerk'

---3  employee  working in p2 and having employee num smaller than 10000

select emp_no from Works_on where Works_on.project_no='p2' and Works_on.emp_no<10000

---4 the employee num for all employee who didn't enter their project in 1998

select emp_no from Works_on where YEAR(enter_date)!=1998

----5 employee num for all employee who have a leading job(i.e,Analyst or manager) in project p1

select emp_no from Works_on where Works_on.Job='Analyst' and Works_on.project_no='p1'

---6 enter dates for all employess in project p2 whose jobs have not been determined yet
```

select enter_date from Works_on where Works_on.project_no='p2' and Works_on.Job IS NULL

----7 first names contain two letter t's

select emp_no,emp_lname from Employee where Employee.emp_fname like '%tt%'

---8 frist names of all employees

select emp_no,emp_fname from Employee where emp_lname like '_o%' or emp_lname like '_a%' and emp_lname like '%es'

---9 all employees whose departments are located in seattle

select emp_no from Employee where dept_no in (select dept_no from Departments1 where location = 'Seattle')

---10 the last and first names of all employees who entered their projects

select emp_lname,emp_fname from Employee where emp_no = (select emp_no from Works_on where enter_date = '1998.1.4')

-----11 group all departments using their locations

select location from Departments1 group by location

----12 the biggest employee number

select MAX(emp_no) from Employee

----13 the jobs that are done by more than two employees

```
select job,count(emp_no) as counts
from works_on
group by job
having count(emp_no)>2 and job is not null
```

---14 the employee number of all employees who are clerks or work for department d3

```
select distinct(w.emp_no) from works_on w
join employee e
on e.emp_no=w.emp_no
where w.job='Clerk' or e.dept_no=3
```