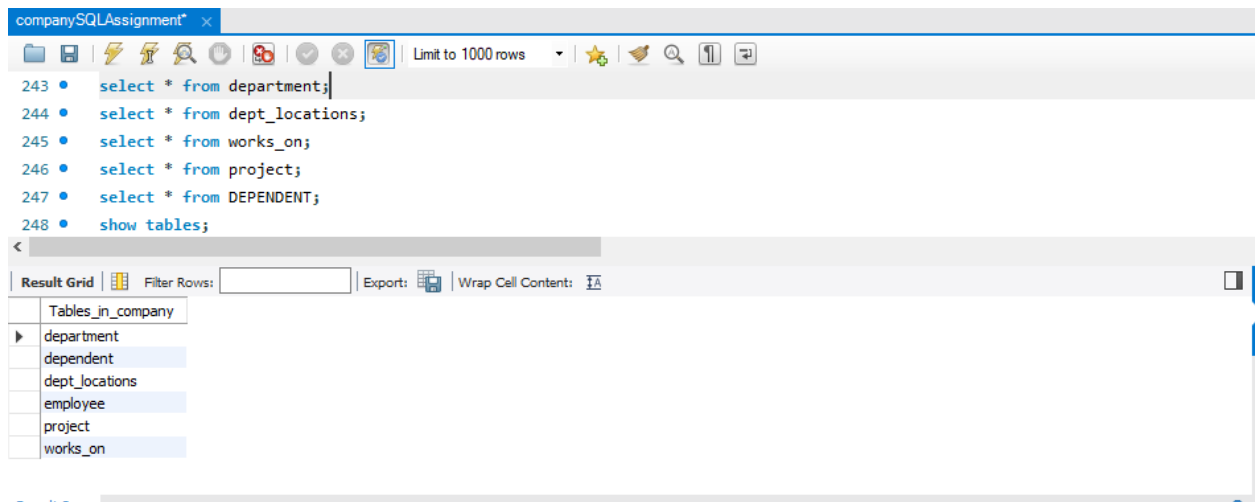


Show Tables in DATABASE COMPANY



## Table Employee

[illegible]

## Table Department

companySQLAssignment\* x

Limit to 1000 rows

```
242 • select * from employee;
243 • select * from department;
244 • select * from dept_locations;
245 • select * from works_on;
246 • select * from project;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: [fA](#)

	Dname	Dnumber	Mgr_ssn	Mgr_start_date
▶	Headquarters	1	888665555	1981-06-19
	Administration	4	987654321	1995-01-01
	Research	5	333445555	1988-05-22
*	NULL	NULL	NULL	NULL

## Table Dept\_location

companySQLAssignment\* x

Limit to 1000 rows

```
242 • select * from employee;
243 • select * from department;
244 • select * from dept_locations;
245 • select * from works_on;
246 • select * from project;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: [fA](#)

	Dnumber	Dlocation
▶	1	Houston
	4	Stafford
	5	Bellaire
	5	Houston
	5	Sugarland
*	NULL	NULL

## Table Works\_on

companySQLAssignment\*

Limit to 1000 rows

```
244 • select * from dept_locations;  
245 • select * from works_on;  
246 • select * from project;  
247 • select * from DEPENDENT;  
248 • show tables;  
249 • Select e1.Fname , e1.Lname , e1.Dno
```

Result Grid

Essn	Pno	Hours
123456789	1	32.5
123456789	2	7.5
333445555	2	10.0
333445555	3	10.0
333445555	10	10.0
333445555	20	10.0
453453453	1	20.0
453453453	2	20.0
666884444	3	40.0
888665555	20	16.0
987654321	20	15.0
987654321	30	20.0
987987987	10	35.0
987987987	30	5.0
999887777	10	10.0
999887777	30	30.0
NULL	NULL	NULL

## Table Project

companySQLAssignment\*

Limit to 1000 rows

```
244 • select * from dept_locations;  
245 • select * from works_on;  
246 • select * from project;  
247 • select * from DEPENDENT;  
248 • show tables;
```

Result Grid

Pname	Pnumber	Plocation	Dnum
ProductX	1	Bellaire	5
ProductY	2	Sugarland	5
ProductZ	3	Houston	5
Computerization	10	Stafford	4
Reorganization	20	Houston	1
Newbenefits	30	Stafford	4
NULL	NULL	NULL	NULL

## Table Dependent

companySQLAssignment\* x

Limit to 1000 rows

```
242 • select * from employee;
243 • select * from department;
244 • select * from dept_locations;
245 • select * from works_on;
246 • select * from project;
247 • select * from DEPENDENT;
```

Result Grid

Filter Rows:

Edit: Export/Import: Wrap Cell Content:

	Essn	Dependent_name	Sex	Bdate	Relationship
▶	123456789	Alice	F	1988-12-30	Daughter
	123456789	Elizabeth	F	1967-05-05	Spouse
	123456789	Michael	M	1988-01-04	Son
	333445555	Alice	F	1986-04-04	Daughter
	333445555	Joy	F	1958-05-03	Spouse
	333445555	Theodore	M	1983-10-25	Son
	987654321	Abner	M	1942-02-28	Spouse
*	NULL	NULL	NULL	NULL	NULL

1. `select e1.Fname , e1.Lname , e1.Dno from EMPLOYEE e1`  
`inner join EMPLOYEE e2`  
`on e2.fname = 'James' and e2.lname = 'Borg' and e2.Ssn = e1.Super_ssn`  
`order by e1.Lname, e1.Fname ;`

companySQLAssignment\* x

Limit to 1000 rows

```
253 • select e1.Fname , e1.Lname , e1.Dno
254 from EMPLOYEE e1
255 inner join EMPLOYEE e2
256 on e2.fname = 'James' and e2.lname = 'Borg' and e2.Ssn = e1.Super_ssn
257 order by e1.Lname, e1.Fname ;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Fname	Lname	Dno
▶	James	Borg	1
▶	Jennifer	Wallace	4
▶	Franklin	Wong	5

2. select e.Fname as firstName , e.Lname as lastName

from EMPLOYEE e , (select max(salary) as Max\_Salary from EMPLOYEE

where salary < (select max(salary) from EMPLOYEE

where salary < (select max(salary) from EMPLOYEE)))Third\_Highest\_Salary

where e.salary = Third\_Highest\_Salary.Max\_Salary;

The screenshot shows a SQL query editor window titled "companySQLAssignment\* x". The query is as follows:

```
264 • select e.Fname as firstName , e.Lname as lastName
265   from EMPLOYEE e , (select max(salary) as Max_Salary from EMPLOYEE
266   where salary < (select max(salary) from EMPLOYEE
267   where salary < (select max(salary) from EMPLOYEE)))Third_Highest_Salary
268   where e.salary = Third_Highest_Salary.Max_Salary;
```

Below the query editor, there is a "Result Grid" section. It includes a "Filter Rows:" input field, an "Export:" button, and a "Wrap Cell Content:" checkbox. The result grid shows the following data:

firstName	lastName
Franklin	Wong

3. select Dname , Dnumber

from EMPLOYEE

inner join DEPARTMENT

on Dno = Dnumber and Ssn not in (select Essn from WORKS\_ON )

order by Dname;

The screenshot shows a SQL query editor window titled "companySQLAssignment\* x". The query is as follows:

```
275 • select Dname , Dnumber
276 from EMPLOYEE
277 inner join DEPARTMENT
278 on Dno = Dnumber and Ssn not in (select Essn from WORKS_ON )
279 order by Dname;
```

Below the query editor, there is a "Result Grid" section. It includes a "Filter Rows:" input field, an "Export:" button, and a "Wrap Cell Content:" checkbox. The result grid itself is currently empty, showing only the column headers "Dname" and "Dnumber".

4. Select proj.Dname , proj.Project\_Hours , emp.Emp\_Hours

From (Select Dname , SUM(Hours) AS Project\_Hours From WORKS\_ON , PROJECT , DEPARTMENT

Where Pno = Pnumber and Dnum = Dnumber

Group by Dname

)proj

INNER JOIN

(Select Dname , SUM(Hours) AS Emp\_Hours From WORKS\_ON , EMPLOYEE ,DEPARTMENT

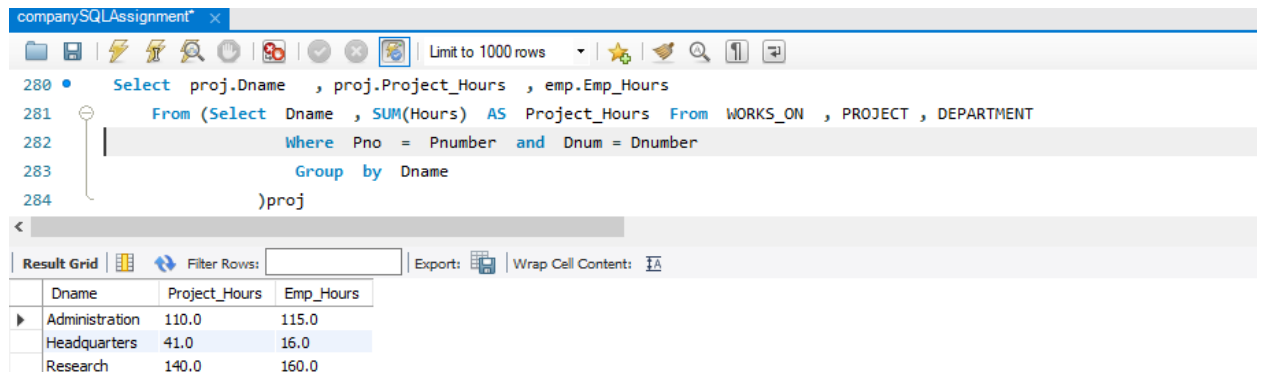
Where Ssn = Essn and Dno = Dnumber

Group by Dname

)emp

ON proj.Dname = emp.Dname

Order by proj.Dname;



The screenshot shows a SQL query editor window titled "companySQLAssignment". The query is as follows:

```
280 Select proj.Dname , proj.Project_Hours , emp.Emp_Hours
281 From (Select Dname , SUM(Hours) AS Project_Hours From WORKS_ON , PROJECT , DEPARTMENT
282 Where Pno = Pnumber and Dnum = Dnumber
283 Group by Dname
284 )proj
```

Below the query editor, there is a "Result Grid" section. It includes a "Filter Rows:" input field, an "Export:" button, and a "Wrap Cell Content:" checkbox. The results are displayed in a table with three columns: Dname, Project\_Hours, and Emp\_Hours.

Dname	Project_Hours	Emp_Hours
Administration	110.0	115.0
Headquarters	41.0	16.0
Research	140.0	160.0



5. Select DISTINCT d.Dname , p.Pname

From DEPARTMENT d , EMPLOYEE e , PROJECT p

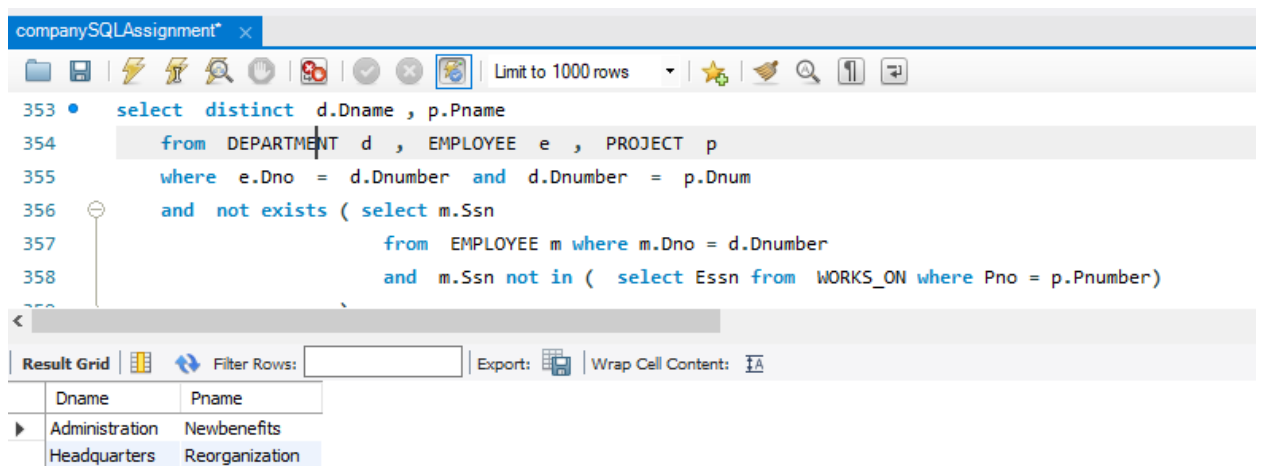
Where e.Dno = d.Dnumber and d.Dnumber = p.Dnum

and not exists ( Select m.Ssn From EMPLOYEE m

Where m.Dno = d.Dnumber

And m.Ssn not in ( Select Essn From WORKS\_ON Where Pno = p.Pnumber) )

Order by d.Dname , p.Pname ;



The screenshot shows a SQL query editor window titled "companySQLAssignment\*". The query is as follows:

```
353 • select distinct d.Dname , p.Pname
354   from DEPARTMENT d , EMPLOYEE e , PROJECT p
355   where e.Dno = d.Dnumber and d.Dnumber = p.Dnum
356   and not exists ( select m.Ssn
357                     from EMPLOYEE m where m.Dno = d.Dnumber
358                     and m.Ssn not in ( select Essn from WORKS_ON where Pno = p.Pnumber)
359   )
```

Below the query editor, the "Result Grid" is displayed with the following data:

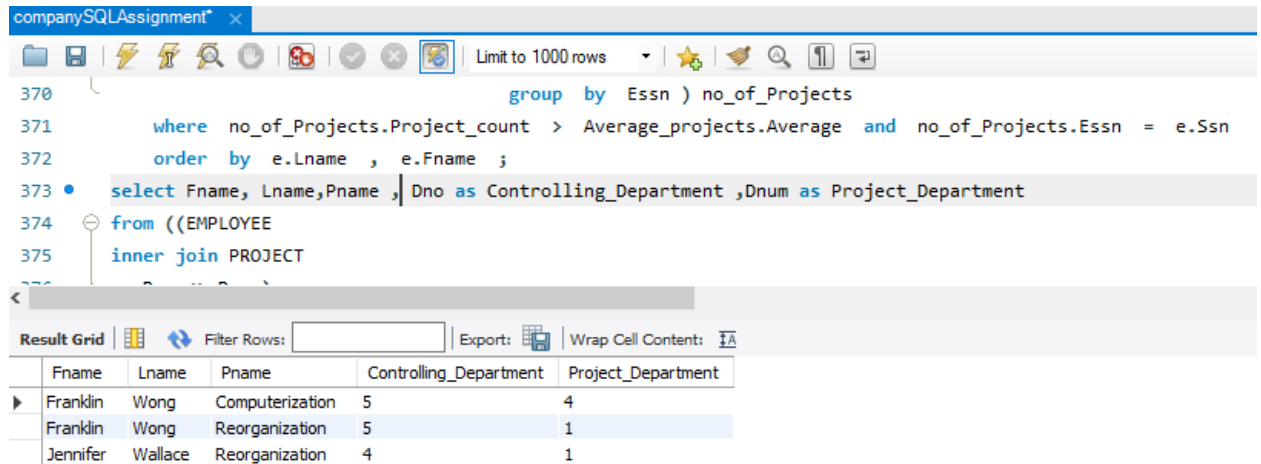
Dname	Pname
Administration	Newbenefits
Headquarters	Reorganization

6. Select Fname, Lname,Pname , Dno AS Controlling\_Department ,Dnum AS Project\_Department

from ( (EMPLOYEE inner join PROJECT on Dno <> Dnum)

inner join WORKS\_ON on Ssn = Essn and Pno = Pnumber)

Order by Fname, Lname,Pname;



The screenshot shows a SQL query editor window titled "companySQLAssignment". The query is as follows:

```
370         group by Essn ) no_of_Projects
371     where no_of_Projects.Project_count > Average_projects.Average and no_of_Projects.Essn = e.Ssn
372     order by e.Lname , e.Fname ;
373 • select Fname, Lname,Pname , Dno as Controlling_Department ,Dnum as Project_Department
374 from ((EMPLOYEE
375 inner join PROJECT
```

Below the query editor, the "Result Grid" is displayed, showing the results of the query. The grid has columns: Fname, Lname, Pname, Controlling\_Department, and Project\_Department. The results are as follows:

Fname	Lname	Pname	Controlling_Department	Project_Department
Franklin	Wong	Computerization	5	4
Franklin	Wong	Reorganization	5	1
Jennifer	Wallace	Reorganization	4	1

7. Select e.Fname , e.Lname , no\_of\_Projects.Project\_count , Average\_projects.Average  
AS Average\_projects

From EMPLOYEE e , (Select Avg(Proj\_count.PCount) AS Average

From ( Select count(Pno) AS PCount From WORKS\_ON

Group by Essn

) Proj\_count

) Average\_projects ,

(Select Essn , count(Pno) AS Project\_count From WORKS\_ON

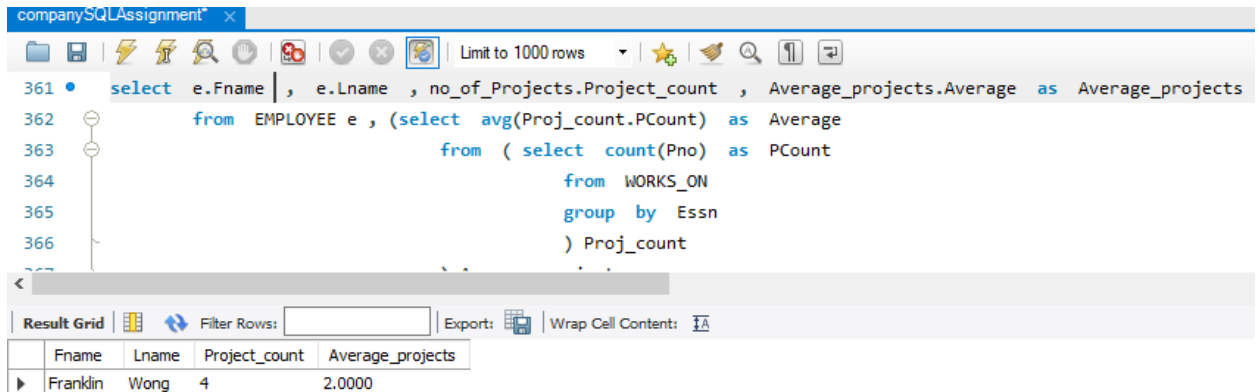
Group by Essn

) no\_of\_Projects

Where no\_of\_Projects.Project\_count > Average\_projects.Average

and no\_of\_Projects.Essn = e.Ssn

Order by e.Lname , e.Fname ;



The screenshot shows a SQL query editor window titled "companySQLAssignment". The query is as follows:

```
361 select e.Fname , e.Lname , no_of_Projects.Project_count , Average_projects.Average as Average_projects
362 from EMPLOYEE e , (select avg(Proj_count.PCount) as Average
363 from ( select count(Pno) as PCount
364 from WORKS_ON
365 group by Essn
366 ) Proj_count
367 ) Average_projects ,
368 (Select Essn , count(Pno) AS Project_count From WORKS_ON
369 Group by Essn
370 ) no_of_Projects
371 Where no_of_Projects.Project_count > Average_projects.Average
372 and no_of_Projects.Essn = e.Ssn
373 Order by e.Lname , e.Fname ;
```

The results are displayed in a table with the following columns: Fname, Lname, Project\_count, and Average\_projects. The results show one row for Franklin Wong with a Project\_count of 4 and an Average\_projects value of 2.0000.

Fname	Lname	Project_count	Average_projects
Franklin	Wong	4	2.0000

8. Select query1.Pno, query2.Pname , query1.no\_of\_employees

From ( Select Pno , Count(Essn) AS no\_of\_employees

From WORKS\_ON

Group by Pno

Having Count(Essn) = (Select max(count\_emp.count\_of\_employees)

From (Select count(\*) as count\_of\_employees

From WORKS\_ON

Group by Pno

)count\_emp

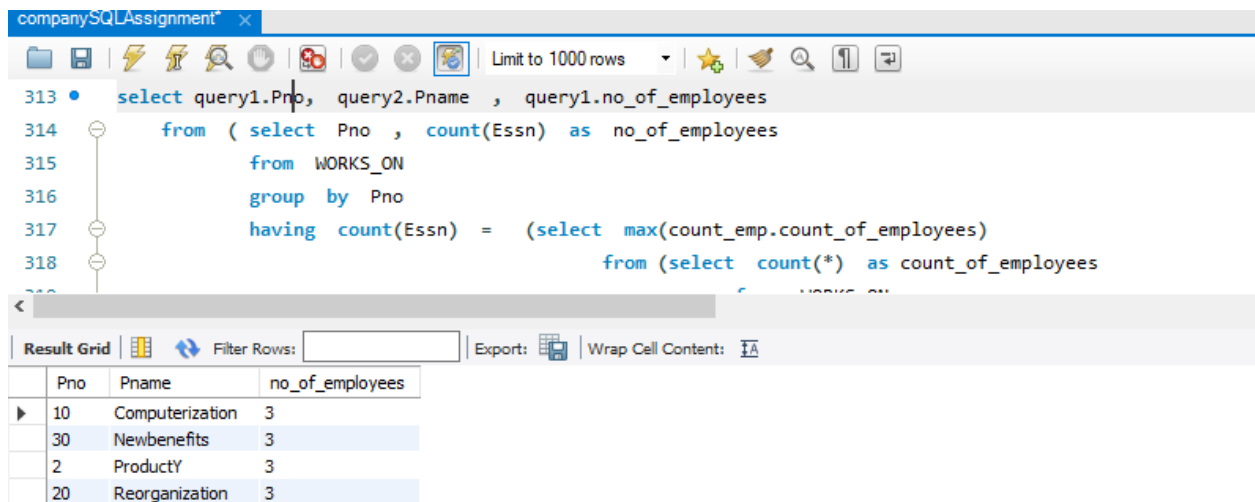
)

)query1,( Select Pnumber , Pname

From PROJECT )query2

Where query1.Pno = query2.Pnumber

Order by query2.Pname;



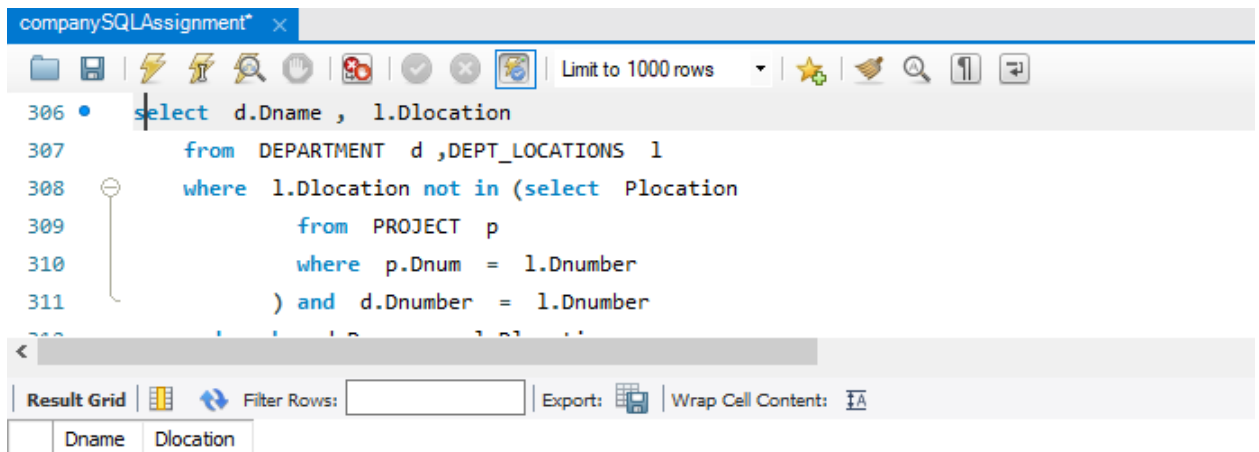
The screenshot shows a SQL query editor window titled "companySQLAssignment". The query is as follows:

```
313 • select query1.Pno, query2.Pname , query1.no_of_employees
314 from ( select Pno , count(Essn) as no_of_employees
315 from WORKS_ON
316 group by Pno
317 having count(Essn) = (select max(count_emp.count_of_employees)
318 from (select count(*) as count_of_employees
319 from WORKS_ON
320 group by Pno) count_emp)
321 )query1,( Select Pnumber , Pname
322 From PROJECT )query2
323 Where query1.Pno = query2.Pnumber
324 Order by query2.Pname;
```

Below the query editor, there is a "Result Grid" section. It includes a "Filter Rows:" input field, an "Export:" button, and a "Wrap Cell Content:" checkbox. The results are displayed in a table with the following data:

Pno	Pname	no_of_employees
10	Computerization	3
30	Newbenefits	3
2	ProductY	3
20	Reorganization	3

9.      Select d.Dname , l.Dlocation From DEPARTMENT d , DEPT\_LOCATIONS l
- Where l.Dlocation not in (Select Plocation From PROJECT p
- Where p.Dnum = l.Dnumber
- )
- and d.Dnumber = l.Dnumber
- Order by d.Dname , l.Dlocation ;



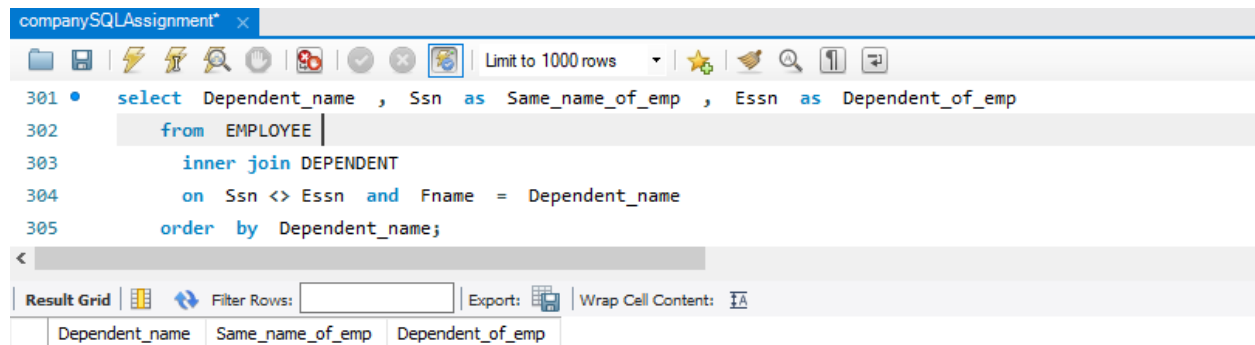
The screenshot shows a SQL IDE window titled "companySQLAssignment". The query editor contains the following SQL code:

```
306 • select d.Dname , l.Dlocation
307       from DEPARTMENT d ,DEPT_LOCATIONS l
308       where l.Dlocation not in (select Plocation
309                                from PROJECT p
310                                where p.Dnum = l.Dnumber
311                                ) and d.Dnumber = l.Dnumber
```

The interface includes a toolbar with icons for file operations, execution, and navigation. A "Limit to 1000 rows" dropdown is visible. Below the query editor, the "Result Grid" tab is active, showing a table with two columns: "Dname" and "Dlocation".

Dname	Dlocation
-------	-----------

10.   Select Dependent\_name , Ssn AS Same\_name\_\_emp , Essn AS Dependent\_of\_emp  
From EMPLOYEE  
  
inner join DEPENDENT  
  
on Ssn <> Essn and Fname = Dependent\_name  
  
Order by Dependent\_name;



The screenshot shows a SQL query editor window titled "companySQLAssignment\*" with a toolbar at the top. The query is as follows:

```
301 • select Dependent_name , Ssn as Same_name_of_emp , Essn as Dependent_of_emp
302      from EMPLOYEE
303      inner join DEPENDENT
304      on Ssn <> Essn and Fname = Dependent_name
305      order by Dependent_name;
```

Below the query editor, there is a "Result Grid" section with a "Filter Rows:" input field, an "Export:" button, and a "Wrap Cell Content:" checkbox. The result grid displays the following columns:

Dependent_name	Same_name_of_emp	Dependent_of_emp
----------------	------------------	------------------

11. Select DISTINCT e.Fname , e.Lname

From ((EMPLOYEE e

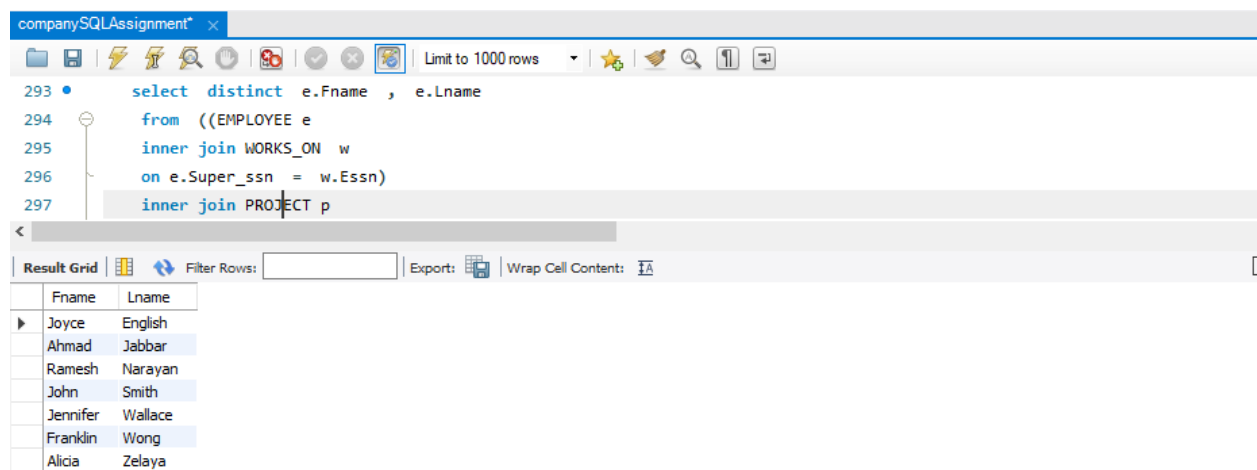
inner join WORKS\_ON w

on e.Super\_ssn = w.Essn)

inner join PROJECT p

on w.Pno = p.Pnumber and e.Dno <> p.Dnum)

Order by e.Lname , e.Fname ;



The screenshot shows a SQL query editor window titled "companySQLAssignment". The query is as follows:

```
293 • select distinct e.Fname , e.Lname
294 from ((EMPLOYEE e
295 inner join WORKS_ON w
296 on e.Super_ssn = w.Essn)
297 inner join PROJECT p
```

Below the query editor, the "Result Grid" is displayed, showing the results of the query. The results are as follows:

Fname	Lname
Joyce	English
Ahmad	Jabbar
Ramesh	Narayan
John	Smith
Jennifer	Wallace
Franklin	Wong
Alicia	Zelaya