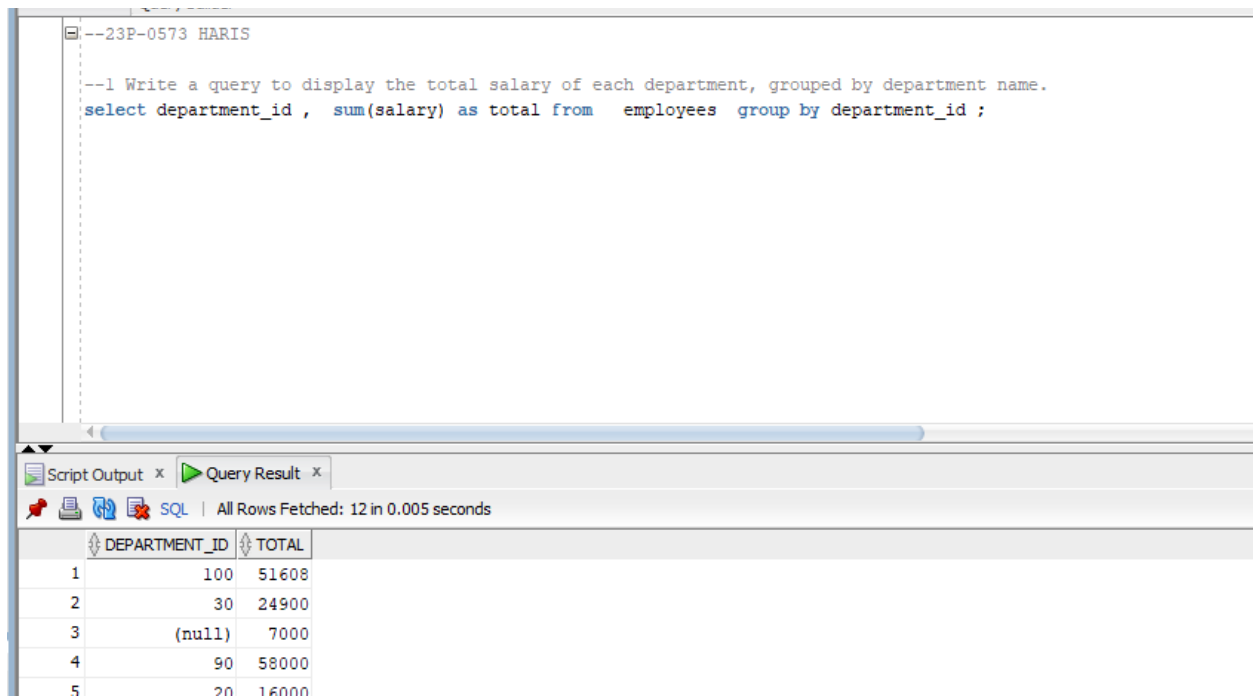


Name : Haris

Roll # 23P-0573

--23P-0573 HARIS

--1 Write a query to display the total salary of each department, grouped by department name.
select department_id , sum(salary) as total from employees group by department_id ;



The screenshot shows a SQL query execution window. The query is: `select department_id , sum(salary) as total from employees group by department_id ;`. The results are displayed in a table with two columns: DEPARTMENT_ID and TOTAL. The table contains five rows of data.

DEPARTMENT_ID	TOTAL
1	51608
2	24900
3 (null)	7000
4	58000
5	16000

--2 Display the number of employees in each department where the count is more than 5. select department_id , count(department_id) from employees group by department_id having count(department_id) > 5 ;

--23P-0573 HARIS

--2 Display the number of employees in each department where the count is more than 5.

```
select department_id , count(department_id) from employees group by department_id having count(department_id) > 5 ;
```

DEPARTMENT_ID	COUNT(DEPARTMENT_ID)
1	100
2	30
3	50
4	80

--3 Find the average salary of employees for each job role, but only show job roles where the average salary is greater than 5000. select job_id , avg(salary) from employees group by job_id having avg(salary) > 5000;

--23P-0573 HARIS

--3 Find the average salary of employees for each job role, but only show job roles where the average salary is greater than 5000.

```
select job_id , avg(salary) from employees group by job_id having avg(salary) > 5000;
```

JOB_ID	AVG(SALARY)
1 IT_PROG	5760
2 AC_MGR	12008
3 AC_ACCOUNT	8300

--4 List the departments where the total salary expenditure exceeds \$100,000. select department_id , avg(salary) from employees group by department_id having avg(salary) > 10000;

--5 Write a query to find the details of the employee with the highest salary in the company.

```
select first_name , last_name , department_id , salary from employees where salary = (select max(SALARY) from employees);
```

```
--6 Find all employees whose salary is above the average salary of the entire company. select
employee_id , first_name , last_name ,salary from employees where salary > (select avg(salary)
from employees);
```

```
--23P-0573 HARIS

--6 Find all employees whose salary is above the average salary of the entire company.
select employee_id , first_name , last_name , salary from employees where salary > (select avg(salary) from employees);
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY
1	Steven	King	24000
2	Neena	Kochhar	17000
3	Alexander	Hunold	9000
4	Bruce	Ernst	6000
5	David	Turner	11000
6	Neena	Kochhar	17000
7	Lex	De Haan	17000
8	Neena	Kochhar	17000
9	Neena	Kochhar	17000
10	Neena	Kochhar	17000
11	Neena	Kochhar	17000
12	Neena	Kochhar	17000
13	Neena	Kochhar	17000
14	Neena	Kochhar	17000
15	Neena	Kochhar	17000
16	Neena	Kochhar	17000
17	Neena	Kochhar	17000
18	Neena	Kochhar	17000
19	Neena	Kochhar	17000
20	Neena	Kochhar	17000
21	Neena	Kochhar	17000
22	Neena	Kochhar	17000
23	Neena	Kochhar	17000
24	Neena	Kochhar	17000
25	Neena	Kochhar	17000
26	Neena	Kochhar	17000
27	Neena	Kochhar	17000
28	Neena	Kochhar	17000
29	Neena	Kochhar	17000
30	Neena	Kochhar	17000

--7 List the names and salaries of employees whose salary is less than the salary of the employee with the ID 100. select first_name , last_name , salary from employees where salary < (select salary from employees where employee_id ='100');

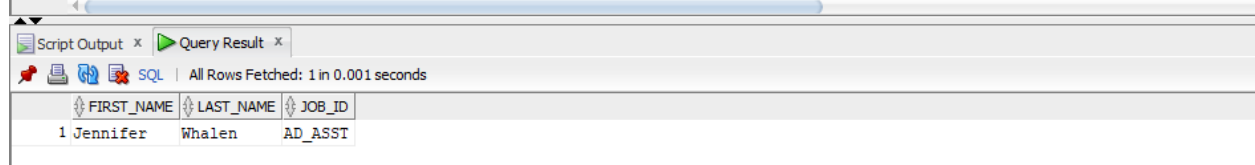
```
--23P-0573 HARIS

--7 List the names and salaries of employees whose salary is less than the salary of the employee with the ID 100.
select first_name , last_name , salary from employees where salary < (select salary from employees where employee_id ='100');
```

FIRST_NAME	LAST_NAME	SALARY
1 Neena	Kochhar	17000
2 Lex	De Haan	17000
3 Alexander	Hunold	9000
4 Bruce	Ernst	6000

--8 Display the first name, last name, and job ID of employees whose job ID is the same as that of the employee with ID 200. select first_name ,last_name ,job_id from employees where job_id= (select job_id from employees where employee_id='200');

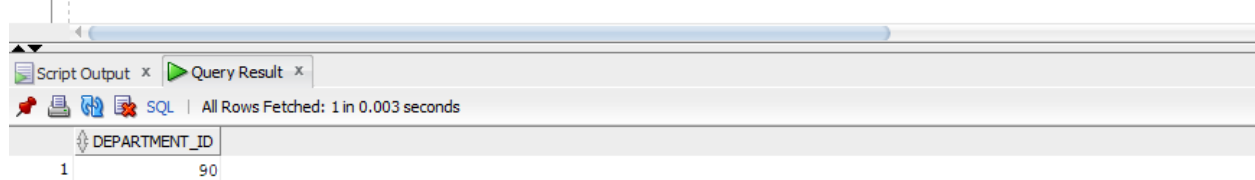
```
--23P-0573 HARIS
--8 Display the first name, last name, and job ID of employees whose job ID is the same as that of the employee with ID 200.
select first_name ,last_name ,job_id from employees where job_id= (select job_id from employees where employee_id='200');
```



	FIRST_NAME	LAST_NAME	JOB_ID
1	Jennifer	Whalen	AD_ASST

--9 Write a query to find all employees who work in the same department as the employee with the highest salary. select department_id from employees where salary = (select max(salary) from employees);

```
--23P-0573 HARIS
--9 Write a query to find all employees who work in the same department as the employee with the highest salary.
select department_id from employees where salary = (select max(salary) from employees);
```



DEPARTMENT_ID
1 90

--10 List all employees whose salary is more than any employee in department 50. select employee_id, first_name , last_name from employees where salary > any (select salary from employees where department_id='50');

```
--23P-0573 HARIS
--10 List all employees whose salary is more than any employee in department 50.
select employee_id, first_name , last_name from employees where salary > any
(select salary from employees where department_id='50');
```





Script Output x Query Result x			
SQL Fetched 50 rows in 0.002 seconds			
	EMPLOYEE_ID	FIRST_NAME	LAST_NAME
1	100	Steven	King
2	101	Neena	Kochhar
3	102	Lex	De Haan

--11 Find all employees whose salary is less than the salary of all employees in department 90.
 select first_name , last_name , salary , employee_id from employees where salary < any (select salary from employees where department_id='90');

```
--23P-0573 HARIS
--11 Find all employees whose salary is less than the salary of all employees in department 90.
select first_name , last_name , salary , employee_id from employees where salary < any (select salary from employees where de
```

Script Output x

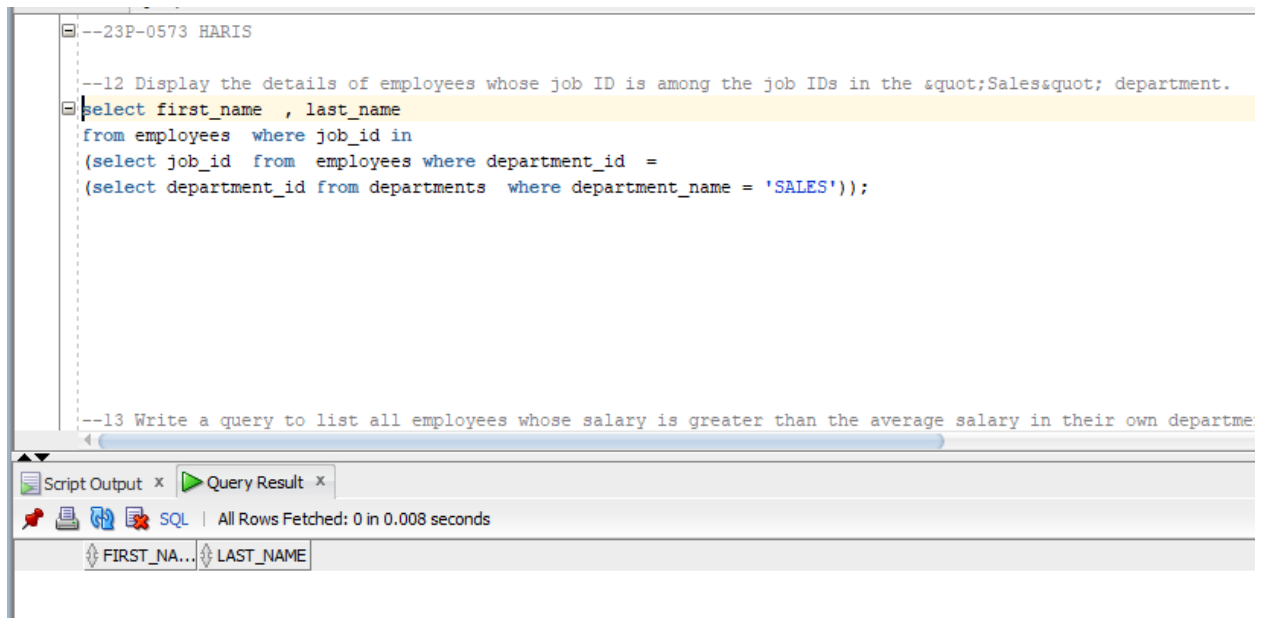
Query Result x





 SQL | Fetched 50 rows in 0.003 seconds

	FIRST_NAME	LAST_NAME	SALARY	EMPLOYEE_ID
1	TJ	Olson	2100	132
2	Steven	Markle	2200	128
3	Hazel	Philtanker	2200	136
4	Tamas	Tandey	2400	127

--12 Display the details of employees whose job ID is among the job IDs in the "Sales" department. select first_name , last_name

from employees where job_id in (select job_id from employees where department_id = (select department_id from departments where department_name = 'SALES')));



The screenshot shows a SQL IDE interface. The main editor window contains the following SQL code:

```
--23P-0573 HARI S  
  
--12 Display the details of employees whose job ID is among the job IDs in the 'Sales' department.  
select first_name , last_name  
from employees where job_id in  
(select job_id from employees where department_id =  
(select department_id from departments where department_name = 'SALES'));
```

Below the editor, there is a toolbar with icons for saving, running, and other functions. The status bar indicates "All Rows Fetched: 0 in 0.008 seconds". The bottom panel shows the column headers for the query result: "FIRST_NAME" and "LAST_NAME".

--13 Write a query to list all employees whose salary is greater than the average salary in their own department. select employee_id, first_name from employees e where salary > (select avg(salary) from EMPLOYEES where department_id = e.DEPARTMENT_ID) ;

--23P-0573 HARIS

--13 Write a query to list all employees whose salary is greater than the average salary in their own department.

```
select employee_id, first_name from employees e where salary >
(select avg(salary) from EMPLOYEES where department_id = e.DEPARTMENT_ID) ;
```

Script Output x Query Result x

SQL | All Rows Fetched: 38 in 0.003 seconds

EMPLOYEE_ID	FIRST_NAME
1	100 Steven
2	103 Alexander
3	104 Bruce
4	108 Nancy
5	109 Daniel
6	114 Dan

--14 Find the departments where the total salary expenditure is greater than the average total salary expenditure of all departments. select department_id from EMPLOYEES e where salary > (select avg(salary) from EMPLOYEES where department_id = e.department_id);

```
--23P-0573 HARIS
--14 Find the departments where the total salary expenditure is greater than the average total salary expenditure of all departments
select department_id from EMPLOYEES e where salary > ( select avg(salary) from EMPLOYEES where department_id = e.department_id);
```

Script Output x Query Result x

SQL | All Rows Fetched: 38 in 0.003 seconds

	DEPARTMENT_ID
1	90
2	60
3	60
4	100

--15 List all employees who have been with the company for more years than the average tenure of their respective department. select first_name , last_name , employee_id, HIRE_DATE from

employees e where (sysdate - hire_date) > (select avg(sysdate - hire_date) from EMPLOYEES
where employees.department_id = e.DEPARTMENT_ID);

--23P-0573 HARI S

--15 List all employees who have been with the company for more years than the average tenure of their respective depart

```
select first_name , last_name , employee_id, HIRE_DATE from employees e where (sysdate - hire_date ) >
(select avg(sysdate - hire_date) from EMPLOYEES where employees.department_id = e.DEPARTMENT_ID);
```

Script Output x Query Result x

SQL | Fetched 50 rows in 0.005 seconds

	FIRST_NAME	LAST_NAME	EMPLOYEE_ID	HIRE_DATE
1	Lex	De Haan	102	13-JAN-01
2	Alexander	Hunold	103	03-JAN-06
3	David	Austin	105	25-JUN-05
4	Valli	Pataballa	106	05-FEB-06
5	Nancy	Greenberg	108	17-AUG-02

-- 16. Insert a backup of all employees from department 10 into a table called
employee_backup. create table employee_backup as select *from employees where 1=0; select
*from employee_backup; insert into employee_backup select *from employees where
department_id='10';

```
--23P-0573 HARIS
-- 16. Insert a backup of all employees from department 10 into a table called `employee_backup`.
create table employee_backup as select *from employees where l=0;
select *from employee_backup;
insert into employee_backup select *from employees where department_id='10';
```

Script Output x Query Result x

Task completed in 0.021 seconds

1 row inserted.

--17 Update the salary of employees in department 20 by 5%, but only if their current salary is less than the average salary of department 20. update employees set salary = salary * 0.5 where department_id='20' and salary < (select avg(salary) from employees where DEPARTMENT_ID='20');

```
--23P-0573 HARIS
--17 Update the salary of employees in department 20 by 5%, but only if their current salary is less than the average salary
update employees set salary = salary * 0.5 where department_id='20'
and salary < (select avg(salary) from employees where DEPARTMENT_ID='20');
```


Script Output x Query Result x

Task completed in 0.021 seconds

row inserted.

row updated.

--18 Delete records from the employee_backup table where the employees no longer exist in the original employees table. DELETE from employee_backup where employee_id not in (select employee_id from employees);



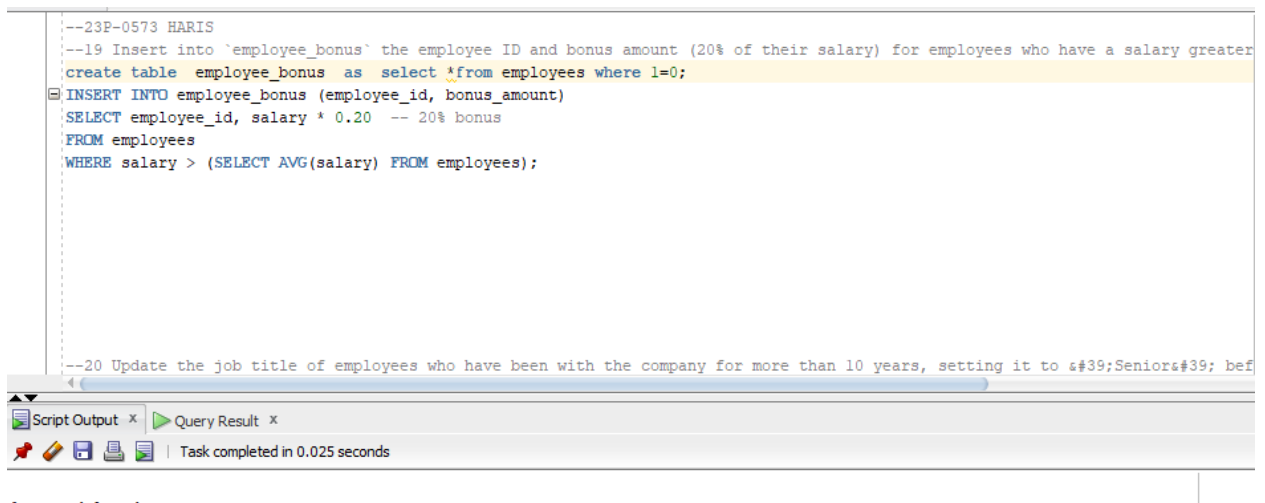
The screenshot shows a SQL Server Enterprise Manager window with a query editor at the top and a results pane at the bottom. The query editor contains the following SQL code:

```
--23P-0573 HARIS
--18 Delete records from the 'employee_backup' table where the employees no longer exist in the original 'employees' tabl
DELETE from employee_backup where employee_id not in (select employee_id from employees );
```

The results pane shows the status of the query execution:

Script Output x Query Result x
Task completed in 0.023 seconds
0 rows deleted.

--19 Insert into employee_bonus the employee ID and bonus amount (20% of their salary) for employees who have a salary greater than the average salary of the company. create table employee_bonus as select *from employees where 1=0; INSERT INTO employee_bonus (employee_id, bonus_amount) SELECT employee_id, salary * 0.20 -- 20% bonus FROM employees WHERE salary > (SELECT AVG(salary) FROM employees);



The screenshot shows a SQL Server Enterprise Manager window with a query editor at the top and a results pane at the bottom. The query editor contains the following SQL code:

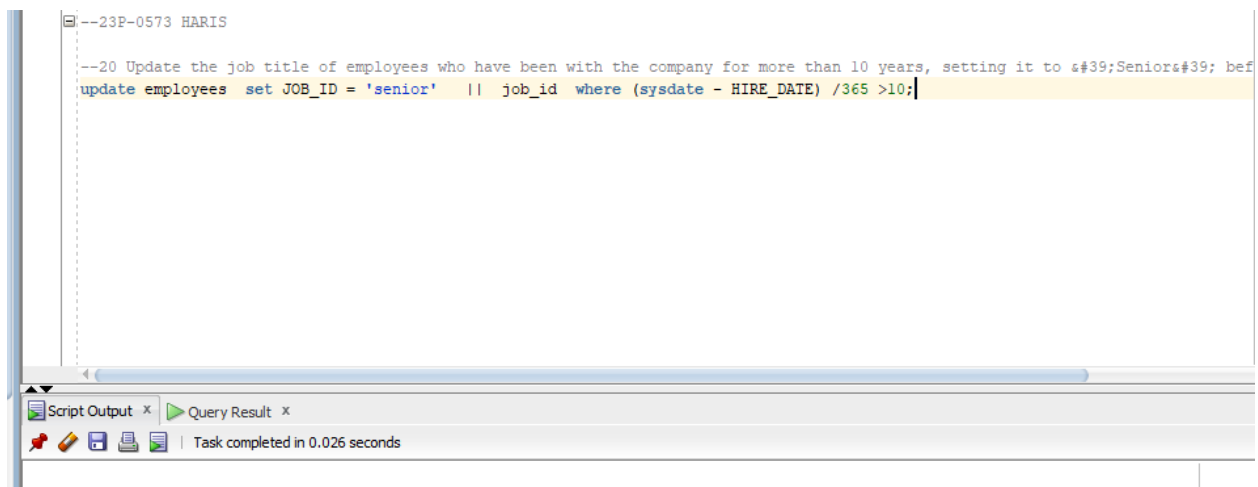
```
--23P-0573 HARIS
--19 Insert into 'employee_bonus' the employee ID and bonus amount (20% of their salary) for employees who have a salary greater
create table employee_bonus as select *from employees where 1=0;
INSERT INTO employee_bonus (employee_id, bonus_amount)
SELECT employee_id, salary * 0.20 -- 20% bonus
FROM employees
WHERE salary > (SELECT AVG(salary) FROM employees);

--20 Update the job title of employees who have been with the company for more than 10 years, setting it to 'Senior' before their current job title.
update employees set JOB_ID = 'senior' || job_id
where (sysdate - HIRE_DATE) /365 >10;
```

The results pane shows the status of the query execution:

Script Output x Query Result x
Task completed in 0.025 seconds
0 rows deleted.

--20 Update the job title of employees who have been with the company for more than 10 years, setting it to 'Senior' before their current job title. update employees set JOB_ID = 'senior' || job_id where (sysdate - HIRE_DATE) /365 >10;



This query showing error i try to resolve but still showing issue .