

NAME: VIDHYASHREE J

REG NO: 241801310

AI&DS

### EXERCISE 5: Restricting and Sorting data

1. Create a query to display the last name and salary of employees earning more than



The screenshot shows an SQL IDE interface. At the top, it says 'User: SYSTEM'. Below that is a breadcrumb 'Home > SQL > SQL Commands'. There is a checkbox for 'Autocommit' which is checked, and a 'Display' dropdown set to '10'. The SQL command entered is: `SELECT last_name, salary  
FROM employees  
WHERE salary > 12000;`. Below the command area, there are tabs for 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Results' tab is active, showing a table with two columns: 'LAST\_NAME' and 'SALARY'. The table contains four rows of data. Below the table, it says '4 rows returned in 0.00 seconds' and there is a 'CSV Export' link.

LAST_NAME	SALARY
Smith	60000
Doe	55000
Johnson	52000
Brown	70000

4 rows returned in 0.00 seconds [CSV Export](#)

12000.

2. Create a query to display the employee last name and department number for employee number 176.

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 10 ▼

```
SELECT last name, department id
FROM employees
WHERE employee id = 176;
```

**Results** Explain Describe Saved SQL History

LAST_NAME	DEPARTMENT_ID
Taylor	80

1 rows returned in 0.00 seconds [CSV Export](#)

3. Create a query to display the last name and salary of employees whose salary is not in the range of 5000 and 12000. (hints: not between )

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 10 ▼

```
SELECT last_name, salary
FROM employees
WHERE salary NOT BETWEEN 5000 AND 12000;
```

**Results** Explain Describe Saved SQL History

LAST_NAME	SALARY
Smith	60000
Doe	55000
Johnson	52000
Brown	70000

4 rows returned in 0.00 seconds [CSV Export](#)

4. Display the employee last name, job ID, and start date of employees hired between February 20,1998 and May 1,1998.order the query in ascending order by start date.(hints: between)

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 10 ▼

```
SELECT last_name, job_id, hire_date
FROM employees
WHERE hire_date BETWEEN TO_DATE('20-FEB-1998', 'DD-MON-YYYY') AND TO_DATE('01-MAY-1998', 'DD-MON-YYYY')
ORDER BY hire_date ASC;
```

**Results** Explain Describe Saved SQL History

LAST_NAME	JOB_ID	HIRE_DATE
Demo	IT_PROG	15-MAR-98

1 rows returned in 0.02 seconds [CSV Export](#)

5.

Display the last name and department number of all employees in departments 20 and 50 in alphabetical order by name.(hints: in, orderby)

User: SYSTEM

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
SELECT last_name, department_id
FROM employees
WHERE department_id IN (20, 50)
ORDER BY last_name ASC;
```

Results Explain Describe Saved SQL History

LAST_NAME	DEPARTMENT_ID
King	20
Queen	50

2 rows returned in 0.00 seconds [CSV Export](#)

6. Display the last name and salary of all employees who earn between 5000 and 12000 and are in departments 20 and 50 in alphabetical order by name. Label the columns EMPLOYEE, MONTHLY SALARY respectively.(hints: between, in)

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 10 ▼

```
SELECT last_name AS EMPLOYEE, salary AS "MONTHLY SALARY"
FROM employees
WHERE salary BETWEEN 5000 AND 12000
      AND department_id IN (20, 50)
ORDER BY last_name ASC;
```

**Results** Explain Describe Saved SQL History

EMPLOYEE	MONTHLY SALARY
King	5500
Queen	6000

2 rows returned in 0.00 seconds [CSV Export](#)

7.

Display the last name and hire date of every employee who was hired in 1994. (hints: like)

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 10 ▼

```
SELECT last_name, hire_date
FROM employees
WHERE TO_CHAR(hire_date, 'YYYY') = '1994';
```

---

**Results** Explain Describe Saved SQL History

LAST_NAME	HIRE_DATE
Green	15-JUL-94

1 rows returned in 0.00 seconds [CSV Export](#)

8. Display the last name and job title of all employees who do not have a manager. (hint: is null)

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 10 ▼

```
SELECT last_name, job_id
FROM employees
WHERE manager_id IS NULL;
```

---

**Results** Explain Describe Saved SQL History

LAST_NAME	JOB_ID
Smith	IT_PROG
Doe	SA_REP
Johnson	HR_REP
Brown	IT_PROG
Taylor	IT_PROG
Demo	IT_PROG
King	IT_PROG
Queen	SA_REP
Green	IT_PROG
NoManager	IT_PROG

10 rows returned in 0.00 seconds [CSV Export](#)

9. Display the last name, salary, and commission for all employees who earn commissions. Sort data in descending order of salary and commissions.(hints: is not nul,orderby)



User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 50 ▼

```
SELECT last name, salary, commission_pct
FROM employees
WHERE commission_pct IS NOT NULL
ORDER BY salary DESC, commission_pct DESC;
```

**Results** Explain Describe Saved SQL History

LAST_NAME	SALARY	COMMISSION_PCT
Verma	15000	.2
Khan	14500	.1
Mehra	13500	.15
Joshi	12500	.3

4 rows returned in 0.00 seconds [CSV Export](#)

10. Display the last name of all employees where the third letter of the name is a.(hints:like)

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 50 ▼

```
SELECT last_name  
FROM employees  
WHERE last_name LIKE '__a%';
```

**Results** Explain Describe Saved SQL History

LAST_NAME
Khan

1 rows returned in 0.00 seconds [CSV Export](#)

11. Display the last name of all employees who have an 'a' and an 'e' in their last name. (hint: like)

User: SYSTEM

Home > SQL > SQL Commands

☒ Autocommit Display 50 ▼

```
SELECT last_name
FROM employees
WHERE last_name LIKE 'a%' AND last_name LIKE 'e%';
```

Results Explain Describe Saved SQL History

LAST_NAME
NoManager
Verma
Mehra

3 rows returned in 0.00 seconds [CSV Export](#)

12. Display the last name and job and salary for all employees whose job is sales representative or stock clerk and whose salary is not equal to 2500 ,3500 or 7000.(hints:in,not in)

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 50 ▼

```
SELECT last_name, job_id, salary
FROM employees
WHERE job_id IN ('SA_REP', 'ST_CLERK')
AND salary NOT IN (2500, 3500, 7000);|
```

**Results** Explain Describe Saved SQL History

LAST_NAME	JOB_ID	SALARY
Doe	SA_REP	55000
Queen	SA_REP	6000
Verma	SA_REP	15000
Joshi	SA_REP	12500
Khan	SA_REP	14500
Mehta	SA_REP	13500

6 rows returned in 0.00 seconds [CSV Export](#)

13. Display  
the last name, salary, and commission for all employees whose commission  
amount is 20%. (hints: use predicate logic)

User: SYSTEM

Home > SQL > SQL Commands

☒ Autocommit Display 50 ▼

```
SELECT last name, salary, commission_pct  
FROM employees  
WHERE commission_pct = 0.20;
```

**Results** Explain Describe Saved SQL History

LAST_NAME	SALARY	COMMISSION_PCT
Verma	15000	.2

1 rows returned in 0.00 seconds

[CSV Export](#)