Ex.No.: 6	RESTRICTING AND SORTING DATA
Date: 14/8/24	

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
101	John	Austin	jaustin@example.com	123-456-7890	01/01/2022	IT_PROG	5000	.23	100	60
102	Betty	Smith	bsmith@example.com	123-456-7891	02/15/2023	HR_REP	4500	.2	100	60
103	Ralph	Jones	rjones@example.com	123-456-7892	05/20/2021	IT_PROG	4800	.05	101	70
104	Chad	Davis	cdavis@example.com	123-456-7893	09/10/2020	SALES	5300	.13	102	80
105	Audrey	Austin	aaustin@example.com	123-456-7894	03/23/2019	HR_REP	3000	.15	100	60
106	Alice	Brown	abrown@example.com	123-456-7895	10/11/2024	IT_PROG	5500	-	101	50
176	Susan	Martinez	smartinez@example.com	555-123-4567	03/05/1999	SALES_REP	9000	.05	102	20
107	Paula	Roberts	proberts@example.com	555-456-7890	07/20/1998	SALES_REP	9500	.04	102	80
108	Karen	Adams	kadams@example.com	555-987-6543	05/10/1999	STOCK_CLERK	8500	-	101	30
109	Mark	Johnson	mjohnson@example.com	555-345-6789	12/15/1998	HR_REP	7800	-	100	60
110	Alice	Baker	abaker@example.com	555-555-1234	03/10/1998	IT_PROG	6200	-	102	60
111	George	Harris	gharris@example.com	555-555-5678	04/15/1998	HR_REP	5800	-	101	30
112	Michael	Ross	mross@example.com	555-555-9012	03/25/1998	SALES	5000	.02	103	80
113	David	Williams	dwilliams@example.com	555-555-1212	06/15/1994	HR_REP	7000	-	101	50
114	Sarah	Thompson	sthompson@example.com	555-555-3434	07/10/2000	IT_PROG	8000	-	-	70
115	James	Martinez	jmartinez@example.com	555-555-5656	08/20/2002	SALES_REP	12000	.05	102	80
116	Laura	Gomez	lgomez@example.com	555-555-7878	09/25/2005	SALES_REP	9000	.03	102	80
117	Kevin	Clark	kclark@example.com	555-555-9090	10/10/2007	FIN_ANALYST	7500	-	101	50
118	Oliver	Acevedo	oacevedo@example.com	555-555-1111	11/11/2010	IT_PROG	8500	-	101	60
119	Ethan	Young	eyoung@example.com	555-555-2323	12/12/2011	SALES_REP	6000	.02	102	80
120	David	Williams	dwilliams@example.com	987-654-3210	10/01/2023	IT_PROG	13000	-	103	50

1. Create a query to display the last name and salary of employees earning more than 12000

SELECT LAST_NAME, SALARY FROM EMPLOYEES WHERE SALARY > 12000;

LAST_NAME	SALARY
Williams	13000

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

SELECT LAST_NAME, DEPARTMENT_ID FROM EMPLOYEES WHERE EMPLOYEE_ID = 176;

LAST_NAME	DEPARTMENT_ID
Martinez	20

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).

SELECT LAST_NAME, SALARY FROM EMPLOYEES WHERE SALARY NOT BETWEEN 5000 AND 12000;

LAST_NAME	SALARY
Smith	4500
Jones	4800
Austin	3000
Williams	13000

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)

SELECT LAST_NAME, JOB_ID, HIRE_DATE FROM EMPLOYEES WHERE HIRE_DATE BETWEEN TO_DATE('1998-02-20', 'YYYY-MM-DD') AND TO_DATE('1998-05-01', 'YYYY-MM-DD') ORDER BY HIRE_DATE ASC;

LAST_NAME	JOB_ID	HIRE_DATE
Baker	IT_PROG	03/10/1998
Ross	SALES	03/25/1998
Harris	HR_REP	04/15/1998

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

SELECT LAST_NAME, DEPARTMENT_ID FROM EMPLOYEES WHERE DEPARTMENT_ID IN (20, 50) ORDER BY LAST_NAME;

LAST_NAME	DEPARTMENT_ID
Brown	50
Clark	50
Martinez	20
Williams	50
Williams	50

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)

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;

EMPLOYEE	MONTHLY SALARY
Brown	5500
Clark	7500
Martinez	9000
Williams	7000

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

SELECT LAST_NAME, HIRE_DATE FROM EMPLOYEES WHERE HIRE_DATE LIKE '%1994';

LAST_NAME	HIRE_DATE
Williams	06/15/1994

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

SELECT LAST_NAME, JOB_ID FROM EMPLOYEES WHERE MANAGER_ID IS NULL;

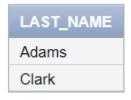| LAST_NAME	JOB_ID
Thompson	IT_PROG

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)

SELECT LAST_NAME, SALARY, COMMISSION_PCT FROM EMPLOYEES WHERE COMMISSION_PCT IS NOT NULL ORDER BY SALARY DESC, COMMISSION_PCT DESC;

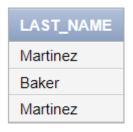| LAST_NAME	SALARY	COMMISSION_PCT
Martinez	12000	.05
Roberts	9500	.04
Martinez	9000	.05
Gomez	9000	.03
Young	6000	.02
Davis	5300	.13
Austin	5000	.23
Ross	5000	.02
Jones	4800	.05
Smith	4500	.2
Austin	3000	.15

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

SELECT LAST_NAME FROM EMPLOYEES WHERE LAST_NAME LIKE '__a%';

LAST_NAME
Adams
Clark

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

SELECT LAST_NAME FROM EMPLOYEES WHERE LAST_NAME LIKE '%a%' AND LAST_NAME LIKE '%e%';

LAST_NAME
Martinez
Baker
Martinez

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)

SELECT LAST_NAME, JOB_ID, SALARY FROM EMPLOYEES WHERE JOB_ID IN ('SALES_REP', 'STOCK_CLERK') AND SALARY NOT IN (2500, 3500, 7000);

LAST_NAME	JOB_ID	SALARY
Martinez	SALES_REP	9000
Roberts	SALES_REP	9500
Adams	STOCK_CLERK	8500
Martinez	SALES_REP	12000
Gomez	SALES_REP	9000
Young	SALES_REP	6000