Brightligh tutorials : Exercise 1 : SQL fundamentals

1. SELECT *
   FROM employees;

Output:

ID	first_name	last_name	department	salary	hire_date	City
1	John	Doe	IT	50 000	2018-06-15	New York
2	Jane	Smith	HR	45000	2019-07-20	Chicago
3	Mike	Johnson	Finance	60 000	2017-09-30	Los Angeles
4	Sarah	Brown	IT	53000	2021-03-25	New York
5	David	White	Marketing	52000	2016-04-10	Sanfrancisco
6	Emily	Davis	IT	62000	2015-02-14	Chicago
7	Robert	Wilson	Finance	59000	2019-10-01	Houston
8	Jessica	Moore	HR	51000	2018-05-22	Los Angeles
9	Daniel	Clark	Marketing	53000	2022-06-01	Chicago
10	Laura	Hall	IT	50000	2020-08-10	Sanfrancis

2. SELECT Distinct department
   FROM employees

Output:

department
IT
HR
Finance
Marketing

3. ~~Sele~~ SELECT ~~firstname~~ first_name, last_name, salary
FROM employees
OrderBy salary DESC;

Output:

first_name	last_name	salary
Emily	Davis	62000
Mike	Johnson	60000
Robert	Wilson	$9000
John	Doe	$5000
Sarah	Brown	$3000
~~Jessica~~ Daniel	~~Moore~~ Clark	$3000
David	White	$2000
Jessica	Moore	$1000
Laura	Hall	$0000
Jane	Smith	46000

4. SELECT first_name, last_name, salary
FROM employees
ORDERBY salary Desc
Limit 5;

Output

first_name	last_name	salary
Emily	Davis	62000
Mike	Johnson	60000
Robert	Wilson	$9000
John	Doe	$5000
Sarah	Brown	$3000

5. SELECT first_name, last_name, department
FROM employees
WHERE department = 'IT';

Output:

first_name	last_name	department
John	Doe	IT
Sarah	Brown	IT
Emily	Davis	IT
Laura	Hall	IT

6. SELECT first_name, last_name, department, salary
FROM employees
WHERE department = 'finance' AND salary > 58000;

Output:

first_name	last_name	department	salary
Mike	Johnson	Finance	60000
Robert	Wilson	Finance	59000

7. SELECT first_name, last_name, department
FROM employees
WHERE department = 'HR' OR department = 'Marketing';

Output:

first_name	last_name	department
Jane	Smith	HR
David	White	Marketing
Jessica	Moore	HR
Daniel	Clark	Marketing

8 Select *
FROM employees
Where department NOT
SELECT first_name, last_name, department
FROM employees
WHERE NOT department = 'IT';

Output

first_name	last_name	department
Jane	SMith	HR
Mike	Johnson	Finance
David	White	Marketing
Robert	Wilson	Finance
Jessica	Moore	HR
Daniel	Clark	Marketing

9. Select first_name, last_name, department
FROM employees
WHERE department IN ('HR', 'IT', 'Finance');

Output

first_name	last_name	department
John	Doe	IT
Jane	Smith	HR
Mike	Johnson	Finance
Sarah	Brown	IT
Emily	Davis	IT
Robert	Wilson	Finance
Jessica	Moore	HR
Laura	Hall	IT

10 SELECT first_name, last_name, department, salary, city
FROM employees
WHERE department = 'IT' AND salary > 50000 and city = 'New York';

first_name	last_name	department	salary	City
John	Doe	IT	55000	New York
Sarah	Brown	IT	53000	New York

11. SELECT first_name, last_name, department, salary
FROM employees
Where department = Finance OR department = marketing AND
salary > 52000 AND ORDER BY salary DESC

12. SELECT first_name, last_name, city
FROM employees

SELECT Distinct city
FROM employees
WHERE department != 'IT' AND department != 'HR';

Output :

City
Houston

13. SELECT first_name, last_name, department, salary, hiredate
FROM Employees
Where NOT IN department ('Finance') AND Salary > 50000
ORDER BY hiredate ASC;

Output

first_name	last_name	department	salary	hire_date

Outp:

first_name	last_name	department	salary	hiredate
Emily	Davis	IT	6 2000	2015-02-14
David	White	Marketing	$2000	2016-04-10
Jessica	Moore	HR	$0000	2018-05-22
John	Doe	IT	$0 000	2018-06-15
Laura	Hall	IT	$0 000	2020-08-10
Sarah	Brown	IT	$3000	2021-03-25
Daniel	Clark	Marketing	$3000	2022-06-01

14. SELECT first_name, last_name, city, department
FROM employees
~~Where department IN ('hi' OR city = 'Chicago' or City = 'Los Angeles'~~
~~AND~~
WHERE city IN ('Los Angeles' OR 'Chicago') AND
department IN ('IT' OR 'Marketing')
LIMIT 3;

first_name	last_name	city	department
Emily	Davis	Chicago	IT
Daniel	Clark	Chicago	Marketing