

## Exercise 1

1. SELECT \*

FROM employees;

id	first_name	last_name	department	department	salary	hire_date	city
1	John	Doe	IT	55000	2018-06-15	New York	
2	Jane	Smith	HR	48000	2019-07-20	Chicago	
3	Mike	Johnson	Finance	60000	2017-09-30	Los Angeles	
4	Sarah	Brown	IT	53000	2021-03-25	New York	
5	David	White	Marketing	52000	2016-04-10	San Francisco	
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	San Francisco	

2. SELECT

DISTINCT department

FROM employees;

department

IT

HR

Finance

Marketing

3. SELECT first-name,  
last-name,  
Salary  
FROM employees  
ORDER BY Salary DESC;

first-name	Last-name	Salary
Emily	Davis	62000
Mike	Johnson	60000
Robert	Wilson	59000

4. SELECT first-name,  
last-name,  
Salary  
FROM employees  
ORDER BY Salary DESC  
Limit 5;

first-name	Last-name	Salary
Emily	Davis	62000
Mike	Johnson	60000
Robert	Wilson	59000
John	Doe	55000
Sarah	Brown	53000

5. SELECT first-name,  
last-name,  
department  
FROM employees

WHERE department = 'IT' ;

first-name	Last-name	department
John	Doe	IT
Sarah	Brown	IT

b. SELECT first-name ,  
Last-name ,  
department ,  
Salary

FROM employees

WHERE department = 'finance'

AND salary > 58000 ;

first-name	Last-name	department	salary
Mike	Johnson	finance	60000

7. SELECT first-name ,  
Last-name ,  
department

FROM employees

WHERE department = 'HR' OR department = 'Marketing' ;

first-name	Last-name	department
Jane	Smith	HR
Jessica	Moore	HR
David	White	Marketing

8. SELECT first-name ,  
Last-name ,  
department

FROM employees  
WHERE department NOT 'IT';

first-name	last-name	department
Jane	Smith	HR
Mike	Johnson	finance
Sarah	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');

first-name	last-name	department
John	Doe	IT
Jane	Smith	HR
Mike	Johnson	finance
Sarah	Brow	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

12. SELECT DISTINCT city  
FROM employees  
WHERE department NOT IN ('IT', 'HR');

City
Los Angeles
Houston
San Francisco
Chicago

13. SELECT \*  
 FROM employees  
 WHERE department < 'finance'  
 AND salary > 50 000  
 ORDER BY hire-date ASC;

id	first-name	last-name	department	salary	hiredate
6	Emily	Davis	IT	62000	2015-02-14
5	David	White	Marketing	52000	2016-04-10
1	John	Doe	IT	55000	2018-06-15
8	Jessica	Moore	HR	51000	2018-05-22
4	Sara	Brown	IT	53000	2021-03-25

city
Chicago
San Francisco
New York
Los Angeles
New York

14. SELECT first-name,  
 last-name,  
 department,  
 city  
 FROM employees  
 WHERE city IN ('Chicago', 'Los Angeles')  
 AND department IN ('IT', 'Marketing')  
 limit 3;

first-name	last-name	department	city
Emily	Davis	IT	Chicago
Daniel	Clark	Marketing	Chicago