

NTShembos Maluleke

Q4

```
SELECT first-name, last-name, salary
FROM employees
ORDER BY salary DESC
LIMIT 5;
```

Output

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

Q5

```
SELECT first-name, last-name,
       department
  FROM employees
 WHERE department = 'IT';
```

Output

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

Q6

```
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

Exercise 1 : SQL Fundamentals

Q1

```
SELECT * FROM employees;
```

Output

id	first-name	last-name	department	salary	hire-date	city
1	John	Doe	IT	\$5000	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	\$30000	2021-03-25	New York
5	David	White	Marketing	\$20000	2016-04-10	San Francisco
6	Emily	Davis	IT	62000	2015-02-14	Chicago
7	Robert	Wilson	Finance	\$80000	2019-10-01	Houston
8	Jessica	Moore	HR	\$10000	2018-05-22	Los Angeles
9	Daniel	Clark	Marketing	\$30000	2022-06-01	Chicago
10	Laura	Hall	IT	\$50000	2020-03-10	San Francisco

Q2

```
SELECT DISTINCT department
  FROM employees;
```

Output

department
IT
HR
Finance
Marketing

Q3

```
SELECT first-name, last-name, salary
  FROM employees
 ORDER BY salary DESC;
```

Output

First-name	Last-name	salary
Emily	Davis	62000
Mike	Johnson	60000
Robert	Wilson	59000

Q10 SELECT first_name, last_name, department, salary, city
 FROM employees
 WHERE department = 'IT'
 AND salary > 50000
 AND city = 'New York';

Output

First name	Last name	Department	Salary	City
John	Doe	IT	55000	New York

Q7 SELECT first_name, last_name, department
 FROM employees
 WHERE department = 'HR'
 OR department = 'Marketing';

Output

First name	Last name	Department
Jane	Smith	HR
Jessica	Moore	HR
David	White	Marketing

Q11 SELECT first_name, last_name, department, salary
 FROM employees
 WHERE (department = 'Finance' OR
 department = 'Marketing')
 AND salary > 52000
 ORDER BY salary DESC;

Output

First name	Last name	Department	Salary
Mike	Johnson	Finance	60000
Robert	Wilson	Finance	59000
Daniel	Clark	Marketing	53000

Q8 SELECT first_name, last_name, department
 FROM employees
 WHERE NOT department = 'IT';

Output

First name	Last name	Department
Jane	Smith	HR
Mike	Johnson	Finance

Q12 SELECT DISTINCT city
 FROM employees
 WHERE department NOT IN ('IT', 'HR');

Output

City
 Total 0

Q9 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
Robert	Wilson	Finance
Mike	Johnson	Finance