

# BRIGHTLEARN TUTORIALS

## DATA ANALYTICS

### EXERCISE 1 : SQL FUNDAMENTALS

Table : employees

1. SQL query to retrieve all columns

Syntax :

```
SELECT *
FROM employees;
```

2. SQL query to find all unique departments

Syntax :

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

3. SQL query to retrieve all employees' first and last names, ordered by salary in descending order

Syntax :

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

4. SQL query to retrieve top 5 highest paid

Syntax :

```
SELECT *
  FROM employees
 ORDER BY salary DESC
  LIMIT 5;
```

5. SQL query to find employees working in IT

Syntax :

```
SELECT *  
FROM employees  
WHERE department = 'IT';
```

6. SQL query to employees working in Finance  
and earning a salary greater than 58 000

Syntax :

```
SELECT *  
FROM employees  
WHERE department = 'Finance' AND salary > 58000;
```

7. SQL query to find employees working in HR  
or Marketing department

Syntax :

```
SELECT *  
FROM employees  
WHERE department = 'HR' OR department = 'Marketing';
```

8. SQL query to find employees not working in IT

Syntax :

```
SELECT *  
FROM employees  
WHERE department != 'IT';
```

9. SQL query to find employees working in HR,  
IT or Finance department

Syntax :

```
SELECT *  
FROM employees  
WHERE department IN ('HR', 'IT', 'Finance');
```

10. SQL query to find employees who are in IT, with salary greater than 50000 and located in New York

Syntax :

```
SELECT *  
FROM employees  
WHERE department = 'IT' AND salary > 50000  
AND city = 'New York';
```

11. SQL query to retrieve first name and last name of employees working in Finance or Marketing, earning 52000 and order results by descending order for salary

Syntax :

```
SELECT first-name,  
       last-name  
FROM employees  
WHERE (department = 'Finance' OR department =  
'Marketing') AND salary > 52000  
ORDER BY salary DESC;
```

12. SQL query to find unique cities where employees work, excluding those in IT and HR

Syntax :

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

13. SQL query for employees not in Finance, having salary greater than 50000 and order by hire date in ascending order

Syntax :

```
SELECT *  
FROM employees  
WHERE department != 'Finance' AND salary > 50000  
ORDER BY hire_date ASC;
```

14. SQL query to find 3 employees working in Chicago or Los Angeles and belonging to IT or Marketing

Syntax :

```
SELECT *  
FROM employees  
WHERE city IN ('Chicago', 'Los Angeles') AND  
department IN ('IT', 'Marketing')  
LIMIT 3;
```