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## SQL (Structure Query Language)

### Definition of a Relational Database

A relational database uses relations or two-dimensional tables store information For example, you might want to store information about all the employees in your company. In a relational database, you create several tables to store different pieces of information about your employees, such as an employee table, a department table, and a salary table.

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## SQL Statements

<b>SELECT</b>	<b>Data retrieval</b>
<b>INSERT</b> <b>UPDATE</b> <b>DELETE</b> <b>MERGE</b>	<b>Data manipulation language (DML)</b>
<b>CREATE</b> <b>ALTER</b> <b>DROP</b> <b>RENAME</b> <b>TRUNCATE</b>	<b>Data definition language (DDL)</b>
<b>COMMIT</b> <b>ROLLBACK</b> <b>SAVEPOINT</b>	<b>Transaction control</b>
<b>GRANT</b> <b>REVOKE</b>	<b>Data control language (DCL)</b>

### Writing basic select statement

1 .Select \* from Employee7.

2.Select \* from department7.

3.Select location\_id ,department\_id from department7.

### Using Arithmetic Expressinon

**Create expressions with number and date data by using arithmetic operators.**

Operator	Description
+	Add
-	Subtract
*	Multiply
/	Divide

4.select last\_name,salary+3000 from employee7.

5. select last\_name,salary-2000 from employee7.

6.select last\_name,salary,12\*salary+100 from employee7.

### Using parentheses

7.select last\_name,salary,12\*(salary+100) from employee7.

### Using column aliases

8.Select last\_name as name ,salary from employee7.

9.Select last\_name “name” ,salary”annual salary” from employee7.

### Concatenation operator

10.select last\_name ||job\_id ||”is employee” from employee7

### Eliminating duplicate row

11.Select distinct department\_id from department7

### Display table structure

**12.**Describe employee7.

**13.**Describe department7.