LEFT JOIN Syntax

SELECT column\_name(s)  
FROM table1  
LEFT JOIN table2ON table1.column\_name = table2.column\_name;

Example

SELECT Customers.CustomerName, Orders.OrderID  
FROM Customers  
LEFT JOIN Orders ON Customers.CustomerID = Orders.CustomerID  
ORDER BY Customers.CustomerName;

### RIGHT JOIN Syntax

SELECT column\_name(s)  
FROM table1  
RIGHT JOIN table2ON table1.column\_name = table2.column\_name;

Example

SELECT Orders.OrderID, Employees.LastName, Employees.FirstName  
FROM Orders  
RIGHT JOIN Employees ON Orders.EmployeeID = Employees.EmployeeID  
ORDER BY Orders.OrderID;

### INNER JOIN Syntax

SELECT column\_name(s)  
FROM table1  
INNER JOIN table2ON table1.column\_name = table2.column\_name;

Example

SELECT Orders.OrderID, Customers.CustomerName  
FROM Orders  
INNER JOIN Customers ON Orders.CustomerID = Customers.CustomerID;

### FULL OUTER JOIN Syntax

SELECT column\_name(s)  
FROM table1  
FULL OUTER JOIN table2ON table1.column\_name = table2.column\_nameWHERE condition;

Example

SELECT Customers.CustomerName, Orders.OrderID  
FROM Customers  
FULL OUTER JOIN Orders ON Customers.CustomerID=Orders.CustomerID  
ORDER BY Customers.CustomerName;

### Self Join Syntax

### SELECT column\_name(s) FROM table1 T1, table1 T2 WHERE condition;

### Example

### SELECT A.CustomerName AS CustomerName1, B.CustomerName AS CustomerName2, A.City FROM Customers A, Customers B WHERE A.CustomerID <> B.CustomerID AND A.City = B.City ORDER BY A.City;

### GROUP BY Syntax

### SELECT column\_name(s) FROM table\_name WHERE condition GROUP BY column\_name(s)ORDER BY column\_name(s);

### Example

### SELECT COUNT(CustomerID), Country FROM Customers GROUP BY Country;

### BACKUP DATABASE

### BACKUP DATABASE databasename TO DISK = 'filepath';

### Example

### BACKUP DATABASE testDB TO DISK = 'D:\backups\testDB.bak';

### With differential

### BACKUP DATABASE testDB TO DISK = 'D:\backups\testDB.bak' WITH DIFFERENTIAL;

## **SQL PRIMARY KEY**

### CREATE TABLE Persons (     ID int NOT NULL PRIMARY KEY,     LastName varchar(255) NOT NULL,     FirstName varchar(255),     Age int);

### Multiple column

### CREATE TABLE Persons (     ID int NOT NULL,     LastName varchar(255) NOT NULL,     FirstName varchar(255),     Age int,     CONSTRAINT PK\_Person PRIMARY KEY (ID,LastName));

## **SQL FOREIGN KEY**

### CREATE TABLE Orders (     OrderID int NOT NULL PRIMARY KEY,     OrderNumber int NOT NULL,     PersonID int FOREIGN KEY REFERENCES Persons(PersonID));

### Multiple column

### CREATE TABLE Orders (     OrderID int NOT NULL,     OrderNumber int NOT NULL,     PersonID int,     PRIMARY KEY (OrderID),     CONSTRAINT FK\_PersonOrder FOREIGN KEY (PersonID)     REFERENCES Persons(PersonID));