

Database System Lab

(CSE 3104)

Session 07

Conditions:

- Each Select Statement within the UNION must have the same number of columns
- Columns must also have similar datatypes
- Columns in each select statement must be in same order

Set Operations :

- **EXCEPT** returns distinct rows from the left input query that aren't output by the right input query.
- **INTERSECT** returns distinct rows that are output by both the left and right input queries operator.

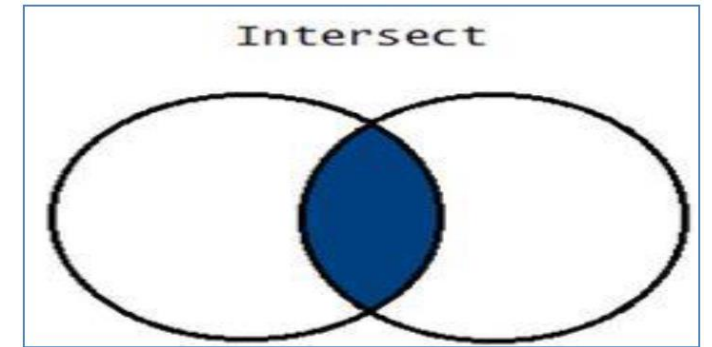
INTERSECT Keyword

Syntax

SELECT column_name(s) **FROM** table_name1

INTERSECT

SELECT column_name(s) **FROM** table_name2



Example

SELECT FirstName, LastName **FROM** Customer_Online

INTERSECT

SELECT FirstName, LastName **FROM** Customer_Offline

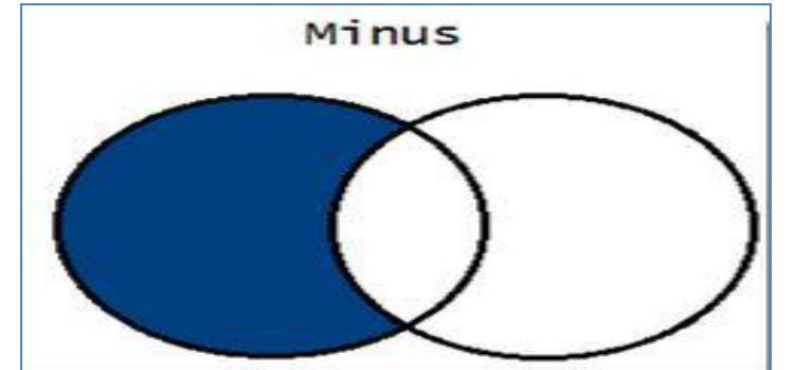
EXCEPT Keyword

Syntax

SELECT column_name(s) **FROM** table_name1

EXCEPT

SELECT column_name(s) **FROM** table_name2



Example

SELECT FirstName, LastName **FROM** Customer_Online

EXCEPT

SELECT FirstName, LastName **FROM** Customer_Offline

Adding SQL Constraints Using ALTER

NOT NULL,
UNIQUE, CHECK,
DEFAULT,
Primary Key,
Foreign Key

Create the Following Table

```
CREATE TABLE Customer (
```

```
CustomerID int IDENTITY(1,1),  
FirstName varchar (50) ,  
LastName varchar (50) ,  
CustomerAddress varchar (50) ,  
City varchar (50) ,  
Country varchar (50)  
);
```

Unique

Syntax:

```
ALTER TABLE Table_Name ADD UNIQUE(ColumnName);
```

Example:

```
ALTER TABLE Customer ADD UNIQUE(CustomerID);
```


CHECK

Syntax:

```
ALTER TABLE Table_Name ADD CHECK(ColumnName);
```

Example:

```
ALTER TABLE Customer ADD CHECK( CustomerID > 0 );
```

Not Null

Syntax:

```
ALTER TABLE Table_Name ALTER COLUMN  
ColumnName DataType NOT NULL;
```

Example:

```
ALTER TABLE Customer ALTER COLUMN CustomerID INT NOT  
NULL;
```

Primary Key

Syntax:

```
ALTER TABLE Table_Name ADD PRIMARY KEY(Column_Name);
```

Example:

```
ALTER TABLE Customer ADD PRIMARY KEY(CustomerID);
```

*The column must be declared NOT NULL from beforehand

Create the Another Table

```
CREATE TABLE CustomerOrder(  
  
OrderID int IDENTITY(101,1),  
OrderDate date ,  
CustomerID int,  
Bill money  
);
```

Foreign Key

Syntax:

```
ALTER TABLE Table_Name2 ADD FOREIGN KEY  
(Column_Name) REFERENCES Table_Name1(Column_Name);
```

Example:

```
ALTER TABLE CustomerOrder ADD FOREIGN KEY (CustomerID)  
REFERENCES Customer(CustomerID);
```

```
CREATE TABLE Customer(  
  
    CustomerID int IDENTITY(1,1) not null,  
    FirstName varchar (50),  
    LastName varchar (50) not null,  
    CustomerAddress varchar (50),  
    City varchar (50),  
    Country varchar (50)  
    CONSTRAINT pk_customer PRIMARY KEY(CustomerID, LastName)  
);
```

```
ALTER table Customer Drop CONSTRAINT  
pk_customer
```

```
ALTER table Customer ADD CONSTRAINT  
pk_customer PRIMARY KEY(CustomerID,LastName);
```

DEFAULT

Syntax:

```
ALTER TABLE Table_Name ADD CONSTRAINT constraint_name  
DEFAULT default_value FOR column_name
```

Example:

```
ALTER TABLE Customer ADD CONSTRAINT customer_default  
DEFAULT 'California' FOR City;
```