

# Project Database Design

## Left Join:

```
/*
Left JOIN:
The left join allows you to query data from two or more tables. Left Join will fetch all the records from the left table
and matching records from another table. If the value is not present for the particular record in right side table then
it will make result as "NULL"

Syntax : select Select_List from table1
         left join table2 on Join_Condition
*/
```

```
select * from customers;
select * from orders;
```

```
/* Customer can have 0 orders and more than 0 orders */
select a.customernumber,a.customername,b.ordernumber,b.status
from customers a
left join orders b on
a.customerNumber = b.customerNumber;
```

```
select a.customernumber,a.customername,b.ordernumber,b.status
from customers a
left join orders b on
a.customernumber = b.customernumber
where ordernumber is null;
```

```
select a.customernumber,a.customername,b.ordernumber,b.status
from customers a
left join orders b on
a.customernumber = b.customernumber
where ordernumber is null;
```

```

/* Right Join */

/*
It will retrieve all the records from the right side table and matching records from
the left side table. If the values are not present in the left side table then it
return "Null"
Syntax:
select Select_list from table1
right join table2 on Join_Condition;
*/

select a.customernumber,a.customername,b.ordernumber,b.status
from customers a
right join orders b on
a.customernumber = b.customernumber ;

```

## Advanced : Stored Procedures

Introduction to Database Objects:

1. tables : Data storage
2. stored procedures
3. views
4. triggers
5. indexes
6. Full-Text search
7. Functions

Use of other objects makes the data secure, it means all these objects will provide the security for the data in the tables.

```

select customerName,phone,city,state,postalcode,country from customers
order by customerName;

```

If you want to save this query on the database server for future reference we do use stored procedures.

To create the procedure we can use "Create Procedure ".

```
/* Create the Procedure */
```

```
DELIMITER $$
```

```
create procedure getCustomersData()
```

```
begin
```

```
select customerName,phone,city,state,postalcode,country from customers
```

```
order by customerName;
```

```
end$$
```

```
/* Call the procedure */
```

```
call getCustomersData()
```

Procedure : Basically pre-compiled block of code and anytime when we call it just execute the query.

Query or Statement : Statement or Query everytime compile and everytime that will be executed.