

SQL BASICS

SELECT Statement:

It is used to select data from a database. Syntax is given below

```
SELECT <column 1>, <column 2>, <column 3>,  
      <literal>,<expression>  
FROM <table A>;
```

- Commas are required, followed by blanked.
- Place each clause on separate line.
- Indent and vertically align.
- Semi-colon is required.

Example:

```
select * from employees ( this will return all the rows and columns )  
  
select employeeid, lastName, firstName,  
from employees      ( this will return the selected columns only)
```

Expressions can be Functions or Just Math.

```
(Example of using Functions)  
select firstname, lastname, hiredate,  
      current_date, date_part('month', hiredate)  
from employees;
```

(current_date is built in that return the date and date_part will extract the month part from hiredate column).

Example of doing math with columns

```
select orderId, unitprice, quantity  
       unitprice * quantity AS "Total"  
from orderDetails;
```

(this will multiply the row values of unitprice with quantity, creates a new column and name it as Total).

Another example of using Built-in function

```
select firstName, lastName, hireDate,  
       to_char('month', hireDate),  
from employees;
```

(in hiredate the month is written in integer format this will change the number into its corresponding name).

Using the Select Command to concatenate two columns as one. Two ways of doing that:

One Way:

```
select concat(firstName, ' ', lastName) as "Name"  
from employees;
```

Other way:

```
select firstName || ' ' || lastName as "Name"  
from employees;
```

(-- symbol to add single line comment and /* */ for multiple line comments)