The SQL SELECT statement is a very powerful statement used to select what columns of a table we want to work with. It can be used to filter certain rows by using certain clauses and functions to perform tasks. The WHERE clause of this statement is useful to select only those rows in which a condition is met, like the evaluation of an expression involving a column compared against certain string expression or value. The statement SELECT \* FROM table\_name selects all the columns of the table\_name to make them available to work with.

Here is the syntax for the SELECT statement:

“SELECT statement ::=

[WITH <common\_table\_expression> [ ,…n ] ]

< query\_expression >

[ ORDER BY { order\_by\_expression | column\_position [ ASC | DESC ]}

[,…n] ]

[ COMPUTE

{ { AVG | COUNT | MAX | MIN | SUM } ( expression ) } [ ,…n ]

[ BY expression [ ,…n] ) ]

[ < FOR Clause > ]

[ OPTION ( < query\_hint > [ , …n ] ) ]

< query expression > ::=

{ < query specification > | ( < query expression > ) }

[ { UNION [ ALL ] | EXCEPT | INTERSECT }

< query specification > | ( <query expression> ) [ . . . n ] ]

< query specification > ::=

SELECT [ ALL | DISTINCT ]

[ TOP expression [ PERCENT] [ WITH TIES ] ]

< select\_list >

[ INTO new\_table ]

[ FROM { <table\_source> } [ , . . . n ] ]

[ WHERE <search\_condition> ]

[ GROUP BY [ ALL ] group\_by\_expression [ , . . . n ]

[ WITH { CUBE | ROLLUP } ] ]

[ HAVING < search\_condition> ]” (Hotek, 2009)

We can SELECT columns from different tables depending if we are using JOIN statements. Also, the result set of rows can be ordered ascendant or descendant. If we use aggregates like:

COUNT, we can find out how many rows a table has. MIN clause will return the minimum value of a column, the same way as MAX will return the maximum value of a column. If we wish to know what is the average value of column we use AVG. SUM clause will return the total of values in a column.

The possibilities of the use of the SELECT statement are big and the best results will depend on the person creating the query.

References

Hotek, M. (2009) Microsoft SQL Server 2008 Step by Step