**Research and provide three to four paragraphs covering the following: What is a subquery, and what are its basic characteristics? What (if any) differences are there between the construction of a subquery in MS Access, MS SQL Server or Oracle? What is a correlated subquery? Give an example of each type.Be sure to cite your references.Post your response, then read the other postings.**

A subquery is a SELECT statement that is nested inside another query.  This allows a query to generate information based on the results of another query.  Subqueries have several characteristics in common.  Subqueries are expressed as statements within parentheses.  The original query is called the outside query and the nested query within the parentheses is called the inner query.  The inner query is always executed first and the output from the inner query is used as the input for the outer query.  Here is an example of a subquery:

SELECT      P\_CODE, P\_PRICE

FROM          PRODUCT

WHERE       P\_PRICE >= (SELECT AVG(P\_PRICE) FROM PRODUCT);

From what I gather from researching how subqueries are created in Access, MS SQL Server, and Oracle, the process is basically the same across all three platforms.  There is some differences in how each platform labels their tables but the basic form of the subquery statement is the same.  Each DBMS requires a select statement with a second select statement nested in the outer query within parentheses.

A correlated subquery is a subquery that executes once for each row of the outer query much like a nested loop in a programming language like Java or C#.  A correlated subquery works counter to a standard subquery because the nested query references a column of the outer query.  This means that the inner query is dependent on the results of the outer query.  Here is an example of a correlated subquery:

SELECT     INV\_NUMBER, P\_CODE, LINE\_UNITS

FROM         LINE LS

WHERE      LS.LINE\_UNITS > ( SELECT AVG(LINE\_UNITS)

                                                       FROM LINE LA

                                                       WHERE LA.P\_CODE = LS.P\_CODE);

Sources

Coronel, C., & Morris, S. (n.d.). *Database systems: Design, implementation, and management*.

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SQL Server: Subqueries. (n.d.). Retrieved February 09, 2016, from http://www.techonthenet.com/sql\_server/subqueries.php

Subquery basics. (n.d.). Retrieved February 09, 2016, from http://allenbrowne.com/subquery-01.html