Application	Technique	Code example
Projection	Select only specific columns	`SELECT STOCK_CODE, STOCK DESCRIPTION FROM STOCK;`
Selection / Restriction	Select only specific rows	`SELECT * FROM STOCK WHERE UNIT PRICE < 100;`
join	Select joined rows from two tables	`SELECT STOCK_DESCRIPTION, SUPPLIER_NAME FROM STOCK JOIN SUPPLIER USING (SUPPLIER ID);`
Calculating Derived fields	Return all individual rows in the set, with a calculation in one or more of the columns	`SELECT STOCK_CODE, UNIT_PRICE * STOCK_LEVEL "Stock Value" FROM STOCK;`
Counting rows in a table	Use COUNT function with no grouping	`SELECT COUNT(*) FROM STOCK;`
Summing values over a table	Use SUM function with no grouping	`SELECT SUM(UNIT_PRICE*STOCK_LEVEL) AS "Total Value" from STOCK;`
Maximum value	Use Max over a set	`SELECT MAX(UNIT_PRICE) from stock;`
Minimum value	Use Min over a set	`SELECT MIN(UNIT_PRICE) from stock;`
Average value	Use Avg over a set	`SELECT AVG(UNIT_PRICE) from stock;`
Grouping aggregates	Return sub-totals by group	`SELECT SUPPLIER_ID, MAX(UNIT_PRICE), MIN(UNIT_PRICE), AVG(UNIT_PRICE) FROM STOCK GROUP BY SUPPLIER ID;`
Filtering on aggregates	Use HAVING to check aggregate values	`SELECT SUPPLIER_ID, MAX(UNIT_PRICE) FROM STOCK GROUP BY SUPPLIER ID having max(unit price) > 100;`
RULES FOR AGGREGATES	*ONLY THE AGGREGATE ATTRIBUTE(S) AND THE GROUPING ATTRIBUTE(S) MAY APPEAR IN THE SELECT LIST*	