Data Analysis Expressions(DAX)						
Category	Function	Description	Syntax			
Aggregation Functions	SUM	Adds up all the values in a column.	SUM( <column>)</column>			
	SUMX	Returns the sum of an expression evaluated over a table.	SUMX(, <expression>)</expression>			
	AVERAGE	Calculates the average of values in a column.	AVERAGE( <column>)</column>			
	MIN	Returns the smallest value in a column.	MIN( <column>)</column>			
	MAX	Returns the largest value in a column.	MAX( <column>)</column>			
	COUNT	Counts the number of non-blank values in a column.	COUNT( <column>)</column>			
	COUNTA	Counts the number of non-empty cells in a column.	COUNTA( <column>)</column>			
	COUNTROWS	Counts the number of rows in a table.	COUNTROWS()			
	DISTINCTCOUNT	Counts the number of distinct values in a column.	DISTINCTCOUNT( <column>)</column>			
	PRODUCT	Returns the product of the numbers in a column.	PRODUCT( <column>)</column>			
	IF	Checks a condition and returns one value if true and another if false.	IF( <logical_test>, <value_if_true>[, <value_if_false>])</value_if_false></value_if_true></logical_test>			
	AND	Returns TRUE if all arguments are TRUE.	AND( <logical1>, <logical2>)</logical2></logical1>			
Logical Functions	OR	Returns TRUE if any argument is TRUE.	OR( <logical1>, <logical2>)</logical2></logical1>			
	SWITCH	Evaluates an expression against a list of values and returns one of several possible results.	SWITCH( <expression>, <value>, <result>[, <value>, <result>][, <else>])</else></result></value></result></value></expression>			
	TRUE	Returns the logical value TRUE.	TRUE()			
	NOT	Changes FALSE to TRUE, or TRUE to FALSE.	NOT( <logical>)</logical>			
	IFERROR	Returns a specified value if the expression results in an error; otherwise, returns the expression's value.	IFERROR(value, value_if_error)			
	TODAY	Returns the current date.	TODAY()			
	NOW	Returns the current date and time.	NOW()			
	DATE	Returns the date in a date-time format.	DATE( <year>, <month>, <day>)</day></month></year>			
	DATEDIFF	Returns the difference between two dates.	DATEDIFF( <start_date>, <end_date>, <interval>)</interval></end_date></start_date>			
	YEAR	Returns the year of a date.	YEAR( <date>)</date>			
Date and Time Functions	MONTH	Returns the month of a date.	MONTH( <date>)</date>			
	DAY	Returns the day of the month from a date.	DAY( <date>)</date>			
	EOMONTH	Returns the last day of the month, before or after a given number of months, in datetime format.	EOMONTH( <start_date>, <months>)</months></start_date>			
	HOUR	Returns the hour as a number from 0 (12:00 A.M.) to 23 (11:00 P.M.).	HOUR( <datetime>)</datetime>			
	NETWORKDAYS	Returns the number of whole workdays between two dates (inclusive)	NETWORKDAYS( <start_date>, <end_date>[, <weekend>, <holidays>])</holidays></weekend></end_date></start_date>			
	TIMEVALUE	Converts a time in text format to a time in datetime format.	TIMEVALUE(time_text)			

Data Analysis Expressions(DAX)						
Category	Function	Description	Syntax			
Text Functions	CONCATENATE	Joins two text strings into one.	CONCATENATE( <text1>, <text2>)</text2></text1>			
	LEFT	Returns the left part of a text string.	LEFT( <text>, <number_of_characters>)</number_of_characters></text>			
	RIGHT	Returns the right part of a text string.	RIGHT( <text>, <number_of_characters>)</number_of_characters></text>			
	MID	Returns a specific number of characters from a text string, starting at the position you specify.	MID( <text>, <start_position>, <number_of_characters>)</number_of_characters></start_position></text>			
	LEN	Returns the number of characters in a text string.	LEN( <text>)</text>			
	UPPER	Converts a text string to uppercase.	UPPER( <text>)</text>			
	LOWER	Converts a text string to lowercase.	LOWER( <text>)</text>			
	FORMAT	Converts a value to text according to the specified format.	FORMAT( <value>, <format_string>[, <locale_name>])</locale_name></format_string></value>			
	REPLACE	replaces part of a text string, based on the number of characters you specify, with a different text string.	REPLACE( <old_text>, <start_num>, <num_chars>, <new_text>)</new_text></num_chars></start_num></old_text>			
	TRIM	Removes all spaces from text except for single spaces between words.	TRIM( <text>)</text>			
	FILTER	Returns a table that represents a subset of another table or expression.	FILTER(, <filter_expression>)</filter_expression>			
	ALL	Removes all filters from the specified columns or tables.	ALL( <column>)</column>			
	CALCULATE	Evaluates an expression in a context modified by the specified filters.	CALCULATE( <expression>, <filter1>, <filter2>,)</filter2></filter1></expression>			
Filter Functions	ALLSELECTED	Removes context filters from columns and rows in the current query, while retaining all other context filters or explicit filters	ALLSELECTED([ <tablename>   <columnname>[, <columnname>[, <columnname>[,]]]])</columnname></columnname></columnname></tablename>			
	SELECTEDVALUE	Returns the value when the context for columnName has been filtered down to one distinct value only. Otherwise returns alternateResult.	SELECTEDVALUE( <columnname>[, <alternateresult>])</alternateresult></columnname>			
	LOOKUPVALUE	Returns the value for the row that meets all criteria specified by one or more search conditions.	LOOKUPVALUE ( <result_columnname>, <search_columnname>, <search_value>[, <search2_columnname>, <search2_value>] [, <alternateresult>])</alternateresult></search2_value></search2_columnname></search_value></search_columnname></result_columnname>			
	TOTALYTD	Calculates the year-to-date total.	TOTALYTD( <expression>,<dates>[,<filter>][,<year_end_date>])</year_end_date></filter></dates></expression>			
Time Intelligence Functions	TOTALQTD	Calculates the quarter-to-date total.	TOTALQTD( <expression>,<dates>[,<filter>])</filter></dates></expression>			
	TOTALMTD	Calculates the month-to-date total.	TOTALMTD( <expression>, <dates>, [<filter>])</filter></dates></expression>			
	PARALLELPERIOD	Returns a table that contains a column of dates shifted by a specified number of intervals.	PARALLELPERIOD( <dates>, <number_of_intervals>, <interval>)</interval></number_of_intervals></dates>			
	SAMEPERIODLASTY EAR	Returns a table that contains a column of dates corresponding to the same period last year.	SAMEPERIODLASTYEAR( <dates>)</dates>			
	ENDOFYEAR	Returns the last date of the year in the current context for the specified column of dates	ENDOFYEAR( <dates> [,<year_end_date>])</year_end_date></dates>			
	NEXTMONTH	Returns a table with a column of all dates from the next month, starting from the first date in the current context's dates column.	NEXTMONTH( <dates>)</dates>			
Math and Trigonometric Functions	ROUND	Rounds a number to the specified number of digits.	ROUND( <number>, <num_digits>)</num_digits></number>			
	CEILING	Rounds a number up to the nearest integer or specified multiple.	CEILING( <number>, <significance>)</significance></number>			
	FLOOR	Rounds a number down to the nearest integer or specified multiple.	FLOOR( <number>, <significance>)</significance></number>			
	DIVIDE	Performs division and returns alternate result or BLANK() on division by 0	DIVIDE( <numerator>, <denominator> [, <alternateresult>])</alternateresult></denominator></numerator>			
	POWER	Returns the result of a number raised to a power.	POWER( <number>, <power>)</power></number>			
	RANDBETWEEN	Returns a random number in the range between two numbers you specify	RANDBETWEEN( <bottom>,<top>)</top></bottom>			

	Data Analysis Expressions(DAX)					
Category	Function	Description	Syntax			
Statistical functions	COMBIN	Returns the number of combinations for a given number of items	COMBIN(number, number_chosen)			
	COMBINA	Returns the number of combinations (with repetitions) for a given number of items	COMBINA(number, number_chosen)			
	GEOMEAN	Returns the geometric mean of the numbers in a column.	GEOMEAN( <column>)</column>			
	GEOMEANX	Returns the geometric mean of an expression evaluated for each row in a table.	GEOMEANX(, <expression>)</expression>			
	MEDIAN	Returns the median of numbers in a column.	MEDIAN( <column>)</column>			
	RANK.EQ	Returns the ranking of a number in a list of numbers.	RANK.EQ( <value>, <columnname>[, <order>])</order></columnname></value>			
	STDEV.S	Returns the standard deviation of a sample population	STDEV.S( <columnname>)</columnname>			
	VAR.S	Returns the variance of a sample population	VAR.S( <columnname>)</columnname>			
Financial functions	FV	Calculates the future value of an investment based on a constant interest rate.	FV( <rate>, <nper>, <pmt>[, <pv>[, <type>]])</type></pv></pmt></nper></rate>			
	РМТ	Calculates the payment for a loan based on constant payments and a constant interest rate.	PMT( <rate>, <nper>, <pv>[, <fv>[, <type>]])</type></fv></pv></nper></rate>			
	PV	$\label{lem:calculates} \textbf{Calculates the present value of a loan or an investment, based on a constant interest rate.}$	PV( <rate>, <nper>, <pmt>[, <fv>[, <type>]])</type></fv></pmt></nper></rate>			
	RATE	Interest rate per period of an annuity.	RATE( <nper>, <pmt>, <pv>[, <fv>[, <type>[, <guess>]]])</guess></type></fv></pv></pmt></nper>			
	RRI	Equivalent interest rate for the growth of an investment.	RRI( <nper>, <pv>, <fv>)</fv></pv></nper>			
	XIRR	Internal rate of return for a schedule of cash flows that is not necessarily periodic.	XIRR(, <values>, <dates>, [, <guess>[, <alternateresult>]])</alternateresult></guess></dates></values>			
	XNPV	Present value for a schedule of cash flows that is not necessarily periodic.	XNPV(, <values>, <dates>, <rate>)</rate></dates></values>			
	YIELD	Returns the yield on a security that pays periodic interest.	YIELD( <settlement>, <maturity>, <rate>, <pr>, <redemption>, <frequency>[, <basis>])</basis></frequency></redemption></pr></rate></maturity></settlement>			
Others	RELATED	Returns a related value from another table.	RELATED( <column>)</column>			
	VALUES	Returns a one-column table that contains the distinct values from the specified column.	VALUES( <column>)</column>			
	BLANK	Returns a blank	BLANK()			
	HASONEVALUE	Returns TRUE when the context for columnName has been filtered down to one distinct value only. Otherwise is FALSE	HASONEVALUE( <columnname>)</columnname>			