Category	Instruction	Syntactical Form	Example
INPUT/OUTPUT (I/O)	**READ** **DISPLAY**	**READ** <variable> **DISPLAY** <variable/constant>	**READ** height **DISPLAY** height
INITIALIZATION	**SET**	**SET** <variable> **TO** <variable/constant>	**SET** x **TO** 5 **SET** x **TO** z
COMPUTATION	**COMPUTE**	**COMPUTE** <variable> **AS** <expression>	**COMPUTE** area **AS** height*width
INCREMENT/DECREMENT	**ADD** **SUBTRACT**	**ADD** <variable/constant> **TO** <variable> **SUBTRACT** <variable/constant> **FROM** <variable>	**ADD** 1 **TO** x **SUBTRACT** 1 **FROM** x **SUBTRACT** x **FROM y**

BRANCHING	**IF-THEN**	**IF** <Boolean expression> **THEN**
		<statement if Boolean expression is true>
		ENDIF
			IF temperature is above 90 **THEN**
			DISPLAY hot today
			ENDIF

	IF-THEN-ELSE	**IF** <Boolean expression> **THEN**
		<statement if Boolean expression is true>
		ELSE
		<statement if Boolean expression is false>
		ENDIF
			IF temperature is above 90 **THEN**
			DISPLAY hot today
			ELSE
			DISPLAY not so hot day
			ENDIF

	NESTED IF-THEN-ELSE	**IF** <Boolean expression 1> **THEN**
		<statements if Boolean expression 1 is true>
		ELSE
		IF <Boolean expression 2> **THEN**
		<statements if Boolean expression 2 is true>
		ELSE
		<statements if Boolean expression 2 is false>
		ENDIF
		ENDIF
			IF temperature is below 40 **THEN**
			DISPLAY cold day
			ELSE
			IF temperature is below 80 **THEN**
			DISPLAY mild day
			ELSE
			DISPLAY hot day
			ENDIF
			ENDIF

REPETITION	**WHILE-ENDWHILE**	**WHILE** <Boolean expression> <statements if Boolean expression is true> **ENDWHILE**	**WHILE** (n > 0) **COMPUTE** sum **AS** sum + n **COMPUTE** n **AS** n - 1 **ENDWHILE**
	DO-WHILE	**DO** <statements executed at least once> **WHILE** <expression>	**DO** **COMPUTE** n **AS** n - 1 **WHILE** (n > 0)
	REPEAT-UNTIL	**REPEAT** <statements> **UNTIL** <Boolean expression>	**SET** n **AS** 10 **REPEAT** **COMPUTE** n **AS** n + 1 **UNTIL** (n > 100)
	FOR-ENDFOR	**FOR** <iteration bounds> <statements> **ENDFOR**	**FOR** each day of the week **DISPLAY** day of the week **ENDFOR**
NESTED	**NESTED-FOR**	**FOR** <iteration bounds> **FOR** <iteration bounds> <statements> **ENDFOR** **ENDFOR**	**FOR** each day of the month **FOR** each day of the week **DISPLAY** day of the month, day of week **ENDFOR** **ENDFOR**
TERMINATE PROGRAM	**HALT**	**HALT**	**HALT**

Definitions

<variable>: An entity that may change its value (e.g. x)
<constant>: A value that does not change (e.g. 4)
<expression>: A mathematical expression involving variables, constants and operators (e.g. 4*x + y + 4*5)
<boolean expression>: An expression that is TRUE or FALSE (e.g. n > 3)
<statement>: A combination of expressions in a program. (eg: **COMPUTE** x **AS** x + y)

Counting Operations

Count as one operation:

1. Each READ, SET, ADD, SUBTRACT, COMPUTE, DISPLAY statement.
2. Each comparison in a Boolean expression, e.g. **IF** x is 0 **OR** x is 20 **THEN** counts as two operations.

ELSE, ENDIF, ENDWHILE, ENDFOR, REPEAT, HALT do **NOT** count as operations.