Keywords:

PRINT, INPUT, INT, LET, IF, THEN, ELSE, ENDIF, FOR, TO, NEXT, WHILE, WEND, DO, LOOP, GOTO, GOTO OF, ON GOTO, GOSUB, BYE, PUNCH, TAPE, KEY, READ-DATA, DIM, REM, READ, DATA, RESTORE, RETURN, RUN, SCR, LIST, READY, STOP, E, STEP, TAB, END, PRINT USING, FROM, DEF, FNEND, SUBEND, CALL, SUBEXIT

Numeric Functions:

RND, SIN, COS, TAN, LOG, EXP, ABS, SQR, SGN

String Functions:

ASC, REM, PRINT, TEXT, LEN, LEFT$, RIGHT$, MID$, STR$, VAL, TAB, VTAB, HTAB, PRINT SPC, SWAP, CHR$, SPACE$

Matrix Functions:

MAT, TRN, CON, ZER, INV, IDN, MAT READ, MAT INPUT, MAT PRINT

File Operations:

OPEN, CLOSE, WRITE, LINE INPUT

Symbols:

‘,’, ‘:’, ‘;’, ‘(’, ‘)’, ‘[’, ‘]’, ‘{’, ‘}’, ‘.’, ‘+’, ‘-’, ‘\*’, ‘/’, ‘=’, ‘<’, ‘<:’, ‘>’, ‘>:’, ‘&’, ‘?’, ‘~’, ‘@’, ‘#’, ‘!’, ‘|’, ‘\_’, ‘\’ and ‘^’

White Characters:

Space and tabs are the only white space characters supported. Both count as a single character’s.

End of line:

End of lines are ‘\n\r’, and ‘\r\n’, and ‘\r’, and ‘\n’, freely intermixed

Strings:

It supports only ‘ “ ” ’ as strings. It is a proprietary dialect of Basic

Comment:

Single-line-comment : ‘ or REM

Identifier:

Identifiers start with a letter, followed by any number of alphanumeric characters plus the underscore. Identifiers are case sensitive.

● id ::= letter { letter | digit | ‘$’ }

● letter ::= ‘a’ | ‘b’ | ‘c’ | ‘d’ | ‘e’ | ‘f’ | ‘g’ | ‘h’ | ‘i’ | ‘j’ | ‘k’ | ‘l’ | ‘m’ | ‘n’ | ‘o’ | ‘p’ | ‘q’ | ‘r’ | ‘s’ | ‘t’ | ‘u’ | ‘v’ | ‘w’ | ‘x’ | ‘y’ | ‘z’ | ‘A’ | ‘B’ | ‘C’ | ‘D’ | ‘E’ | ‘F’ | ‘G’ | ‘H’ | ‘I’ | ‘J’ | ‘K’ | ‘L’ | ‘M’ | ‘N’ | ‘O’ | ‘P’ | ‘Q’ | ‘R’ | ‘S’ | ‘T’ | ‘U’ | ‘V’ | ‘W’ | ‘X’ | ‘Y’ | ‘Z’

● digit ::= ‘0’ | ‘1’ | ‘2’ | ‘3’ | ‘4’ | ‘5’ | ‘6’ | ‘7’ | ‘8’ | ‘9’

● integer ::= digit { digit }

● op ::= ‘+’ | ‘-’ | ‘\*’ | ‘/’ | ‘=’ | ‘<’ | ‘>’ | ‘=’ | ‘<:’ | ’>:’ | ‘^’

Invalid characters: Any other character is invalid.