KARL RAUMER GMBH

LEERZEICHEN

DAS "LEERZEICHEN" FÜR RM-243X

Wichtiger Hinweis

Das vorliegende Handbuch und das dazugehörige Programm wurden vom Autor mit größter Sorgfalt erarbeitet und unter Einschaltung wirksamer Kontrollmaßnahmen repro duziert. Trotzdem sind Fehler nicht ganz auszuschließen. LEERZEICHEN sieht sich deshalb gezwungen, darauf hinzu weisen, daß weder eine Garantie noch die juristische Verantwortung oder irgendeine Haftung für Folgen, die auf Programmfehler oder fehlerhafte Angaben im Handbuch zurückgehen, übernommen werden kann. Für die schriftliche Mitteilung eventueller Fehler sind wir jederzeit dankbar.

Welcome in the handbook for "LEERZEICHEN". The following pages shall describe the commands available to the users of the "LEERZEICHEN" execution environment. "LEERZEICHEN" is a computer language, that for cryptographic systems, is very secure. It gives many applications and one can using it for actual innovations in cryptographisch systems.

"LEERZEICHEN" is a stack-oriented programming language, much like FORTH or PostScript. It revolutionises the means of input by using traditionally overlooked characters in its instruction set.

Contents

U+2000-U+200A Integer
Integers are notated by an encoding system similar to some Eastern language's writing systems.

All numbers on the stack are signed.

U+2000	0
U+2001	1
U+2002	2
U+2003	3
U+2004	4
U+2005	5
U+2006	6
U+2007	7
U+2008	8
U+2009	9
U+200A	10

One-length number sequences (n)
The number n is pushed onto the stack.

Two-length number sequences (n m)
If neither n or m is 10, n and m are pushed separately onto the stack.

If the n is 10, the value 10 + m is pushed onto the stack.

If the m is 10, the value n * 10 is pushed onto the stack.

Three-length number sequences (n m u)
m must be 10.

The value pushed is 10n + u.

U+0009 Print
Print the top of the stack as its ASCII value.

U+180E RESERVED
INTERNAL USE ONLY

Arithmetic

U+000A Add
Adds the two numbers on top of the stack. If a procedure is in the first or second slots of the stack, stop execution.

U+000B Subtract
Subtracts the two numbers on top of the stack. If a procedure is in the first or second slots of the stack, stop execution.

U+000C Multiply
Multiplies the two numbers on top of the stack. If a procedure is in the first or second slots of the stack, stop execution.

U+000D Integer divide
Integer divides the two numbers on top of the stack. If a procedure is in the first or second slots of the stack, stop execution.

U+3164 Max
Pop a b. If a > b, push a. If b > a, push b.

Stack manipulation

U+0020 Drop
Drop the first item on the stack.

U+00A0 Dup
Duplicate the first item on the stack.

U+202F Swap
Swap the top two items on the stack.

U+205F Rotate
Rotate the first three items on the stack. (a b c -- b c a)

Control flow

U+3000 Ifelse
Pop a, b, c. If c is 0, execute a. Otherwise, execute b. a and b must be a procedure. c must be a procedure.

U+2800 RESERVED
INTERNAL USE ONLY

U+200B Start procedure
The following instructions, until U+200C End procedure, are to be interpreted as a procedure. Once a U+200C End procedure is found, push the instructions as a procedure to the stack.

U+200C End procedure
Push the current procedure to the stack. If not in a procedure, no operation.

U+2060 Return
Skip execution to the end of the current procedure.