```
0010: 0000          CALCUL ORG   $0000  POCKET CALCULATOR PROGRAM
0020:
0030:               * * * THE FOLLOWING PROGRAM IS
0040:               *     A POCKET CALCULATOR
0050:               *
0060:               *     INPUT/OUTPUT IS EITHER TELETYPE
0070:               *     OR KIM KEYBOARD AND DISPLAY
0080:               *
0090:               *     INPUT IS GIVEN BY PRESSING THE
0100:               *     KEYS FOR A DECIMAL NUMBER
0110:               *     FOLLOWED BY A FUNCTIONKEY
0120:               *
0130:               * * * FUNCTIONS:
0140:               *
0150:               *     A = + = ADD NUMBER TO RESULT
0160:               *     B = - = SUBTRACT NUMBER FROM RESULT
0170:               *     C = * = MULTIPLY RESULT BY NUMBER
0180:               *     D = / = DIVIDE RESULT BY NUMBER
0190:               *     E = C = CLEAR INPUT NUMBER
0200:               *     F = A = CLEAR RESULT
0210:               *    AD = R = REMAINDER OF LAST DIVISION
0220:               *    DA = I = NUMBER STORED IN MEMORY
0230:               *     + = C = NUMBER FROM MEMORY
0240:               *    PC = % = CALCULATE PERCENTAGE
0250:               *    GO = C = CLEAR RESULT
0260:               *
0270:               *     THE PROGRAM MAKES USE OF THE
0280:               *     INTEGER CALCULATION PACKAGE
0290:               *     'INTCAL' PARTNO 770110.
0300:               *     A 3-BYTE VERSION IS USED.
0310:               *
0320:               *     WHENEVER A DIFFERENT
0330:               *     NUMBER OF BYTES PER
0340:               *     NUMBER IS REQUIRED, THE
0350:               *     DEFINITIONS CONTAINING
0360:               *     SIZE, SIZEA, SIZEB, SIZEC,
0370:               *     ACCU, ACCMSB, ACCLSB,
0380:               *     DACCU, DACLSB AND LOADAD
0390:               *     HAVE TO BE CHANGED TO THE
0400:               *     PROPER VALUE IN RELATION TO
0410:               *     SIZE AND THE PROGRAM MUST BE
0420:               *     REASSEMBLED.
0430:               *
0440:               *     AUTHOR: SIEP DE VRIES
0450:               *     ------  BRUGSTRAAT 32
0460:               *             LIMMEN (NH)
0470:               *             THE NETHERLANDS
0480:               *
0490:               *
0500:               *
```

```
0510:                 *
0520:                 * * * DEFINITIONS:
0530:                 *
0540: 0000            SIZE   *      $0003
0550: 0000            SIZEA  *      SIZE   -01 ; SIZE - 1
0560: 0000            SIZEB  *      SIZE   +03 ; SIZE * 2
0570: 0000            SIZEC  *      SIZE   +02 ; SIZE * 2 - 1
0580: 0000            PIADAT *      $1740      ; PIA TO TEST KIM/TTY
0590: 0000            INITRP *      $17FE      ; INTERRUPT BREAK TRAP
0600: 0000            NMITRP *      $17FA      ; NON-MASKABLE INTERRUPT TR
0610:                 *
0620:                 * * * GENERAL SUBROUTINES:
0630:                 *
0640: 0000            SCANDS *      $1F1F      ; DISPLAY DATA ON LED DISPL
0650: 0000            GETKEY *      $1F6A      ; READ DATA FROM HEX KEYPAD
0660: 0000            OUTCH  *      $1EA0      ; PRINT CHARACTER ON TTY
0670: 0000            GETCH  *      $1E5A      ; READ CHARACTER FROM TTY
0680: 0000            CRLF   *      $1E2F      ; PRINT CARRIAGE RETURN/LIN
0690: 0000            PRIBYT *      $1E3B      ; PRINT BYTE AS 2 DIGITS
0700: 0000            MONITR *      $1C00
0710:                 *
0720:                 * * * CHARACTER SET
0730:                 *
0740: 0000            PLUS   *      $002B
0750: 0000            MIN    *      $002D
0760: 0000            MAAL   *      $002A
0770: 0000            DEEL   *      $002F
0780: 0000            CLRNUM *      $0043
0790: 0000            CLRALL *      $0041
0800: 0000            REP    *      $0052
0810: 0000            MEMIN  *      $0049
0820: 0000            MEMOUT *      $004F
0830: 0000            PRCNT  *      $0025
0840: 0000            VRAAG  *      $003F
0850:                 *
0860:                 * START OF PROGRAM
0870:                 *
0880: 0000 D8         START  CLD                ; INITIALIZE
0890: 0001 78                SEI
0900: 0002 A9 00             LDAIM MONITR
0910: 0004 8D FE 17          STA   INITRP
0920: 0007 8D FA 17          STA   NMITRP
0930: 000A A9 1C             LDAIM MONITR /
0940: 000C 8D FF 17          STA   INITRP +01
0950: 000F 8D FB 17          STA   NMITRP +01
0960: 0012 A0 00             LDYIM $00          ; RESULT AND
0970: 0014 A2 74             LDXIM NULL         ; MEMORY ARE BOTH
0980: 0016 20 13 03          JSR   LOAD         ; ZERO
0990: 0019 A2 7A             LDXIM MEMRY
1000: 001B 20 27 03          JSR   STORE
```

```
1010: 001E 20 00 02  GETINP JSR   INPUT      ; READ NUMBER + FUNCTION
1020: 0021 A2 F9     WEDER  LDXIM DATA       ; ADDRESS OF
1030: 0023 A0 00            LDYIM $00        ; OPERAND
1040: 0025 C9 2B            CMPIM PLUS
1050: 0027 D0 05            BNE   NOADD
1060:                *
1070: 0029 20 35 03         JSR   ADD        ; ADD OPERAND
1080: 002C B0 40            BCS   PROBLM     ; CARRY SET IN ERROR
1090: 002E C9 2D     NOADD  CMPIM MIN
1100: 0030 D0 05            BNE   NOMIN
1110:                *
1120: 0032 20 47 03         JSR   SUB        ; SUBTRACT OPERAND
1130: 0035 B0 37            BCS   PROBLM     ; CARRY CLEAR IS ERROR
1140: 0037 C9 2A     NOMIN  CMPIM MAAL
1150: 0039 D0 05            BNE   NOMAAL
1160:                *
1170: 003B 20 5F 03         JSR   MPY        ; MULTIPLY OPERAND
1180: 003E B0 2E            BCS   PROBLM     ; CARRY SET IS ERROR
1190: 0040 C9 2F     NOMAAL CMPIM DEEL
1200: 0042 D0 05            BNE   NODEEL
1210:                *
1220: 0044 20 AC 03         JSR   DVI        ; DIVIDE BY OPERAND
1230: 0047 B0 25            BCS   PROBLM     ; CARRY CLEAR IS ERROR
1240: 0049 C9 41     NODEEL CMPIM CLRALL
1250: 004B D0 05            BNE   NOCLER
1260: 004D A2 74     CLEAR  LDXIM NULL
1270: 004F 20 13 03         JSR   LOAD       ; JUST LOAD ZERO
1280: 0052 C9 25     NOCLER CMPIM PRCNT
1290: 0054 D0 0C            BNE   NOPER
1300:                *
1310: 0056 20 5F 03         JSR   MPY        ; MULTIPLY BY
1320: 0059 B0 13            BCS   PROBLM     ; PERCENTAGE
1330: 005B A2 77            LDXIM EENHON
1340:                *
1350: 005D 20 AC 03         JSR   DVI        ; DIVIDE BY
1360: 0060 B0 0C            BCS   PROBLM     ; ONE HUNDRED
1370:                *
1380: 0062 C9 52     NOPER  CMPIM REP
1390: 0064 D0 05            BNE   NOREP
1400: 0066 A2 85            LDXIM DACCU
1410: 0068 20 13 03         JSR   LOAD
1420: 006B 4C 1E 00  NOREP  JMP   GETINP
1430: 006E 20 A8 02  PROBLM JSR   ERROR
1440: 0071 4C 1E 00         JMP   GETINP
1450:
1460:
1470:
1480:
1490:
1500:
```

```
1510:
1520:                   *
1530:                   * * * PAGE ZERO DEFINITIONS:
1540:                   *
1550: 0074 00           NULL    =       $00
1560: 0075 00                   =       $00
1570: 0076 00                   =       $00
1580: 0077 00           EENHON  =       $00
1590: 0078 01                   =       $01
1600: 0079 00                   =       $00
1610: 007A 00           MEMRY   =       $00
1620: 007B 00                   =       $00
1630: 007C 00                   =       $00
1640: 007D 00           NUMCAR  =       $00
1650: 007E 00           PREV    =       $00
1660: 007F 00           ACCU    =       $00
1670: 0080              ACCMSB  *       ACCU    -03 ; ACCU - SIZE
1680: 0080              ACCLSB  *       ACCU    +03 ; ACCU + SIZE
1690: 0080              DACCU   *       ACCU    +06 ; ACCU + 2 * SIZE
1700: 0080              DACLSB  *       DACCU   +02 ; DACCU + SIZE - 1
1710: 0080              LOADAD  *       DACCU   +06 ; DACCU + 2 * SIZE
1720: 0080              ACCSAV  *       LOADAD  +02
1730: 0080              MULIND  *       ACCSAV  +01
1740: 0080              MULCNT  *       MULIND  +01
1750: 0080              COUNT   *       MULCNT  +01
1760: 0080              DATA    *       $00F9
1770:
1780: 0200                      ORG     $0200
1790:                   *
1800:                   * * * SUBROUTINE TO INPUT
1810:                   *       DATA + FUNCTION
1820:                   *
1830:                   *       THE RESULT IS SHOWN,
1840:                   *       A NUMBER CAN BE KEYED IN
1850:                   *       FOLLOWED BY A NON-NUMERICAL
1860:                   *       KEY, WHICH CAUSES A RETURN
1870:                   *
1880:                   * * * CLEAR INPUT, STORE IN MEMORY
1890:                   *       AND GET FROM MEMORY ARE
1900:                   *       PROCESSED IN THIS SUBROUTINE
1910:                   *
1920: 0200 A2 F9        INPUT   LDXIM DATA      ; PERFORM OUTPUT
1930: 0202 A0 00                LDYIM $00       ; FIRST
1940: 0204 20 27 03             JSR   STORE
1950: 0207 20 92 02     WERONP  JSR   OUTPUT
1960: 020A A9 00                LDAIM $00       ; CLEAR DIGIT-
1970: 020C 85 7D                STA   NUMCAR    ; COUNTER
1980: 020E 20 71 02     WERINP  JSR   INCHAR    ; READ NEXT CHARACTER
1990: 0211 C9 43                CMPIM CLRNUM    ; CLEAR NUMBER
2000: 0213 F0 EB                BEQ   INPUT     ; RE-DISPLAY RESULT
```

```
2010: 0215 C9 49          CMPIM MEMIN
2020: 0217 D0 0F          BNE   NOMEMI
2030: 0219 A5 F9          LDA   DATA        ; MEMORY IN
2040: 021B 85 7A          STA   MEMRY       ; DISPLAY NUMBER
2050: 021D A5 FA          LDA   DATA   +01
2060: 021F 85 7B          STA   MEMRY  +01
2070: 0221 A5 FB          LDA   DATA   +02
2080: 0223 85 7C          STA   MEMRY  +02
2090: 0225 4C 07 02       JMP   WERONP
2100: 0228 C9 4F    NOMEMI CMPIM MEMOUT      ; NUMBER COMES
2110: 022A D0 0F          BNE   TESDEC      ; FROM MEMORY
2120: 022C A5 7A          LDA   MEMRY       ; DISPLAY IT
2130: 022E 85 F9          STA   DATA
2140: 0230 A5 7B          LDA   MEMRY  +01
2150: 0232 85 FA          STA   DATA   +01
2160: 0234 A5 7C          LDA   MEMRY  +02
2170: 0236 85 FB          STA   DATA   +02
2180: 0238 4C 07 02       JMP   WERONP
2190: 023B C9 30    TESDEC CMPIM '0
2200: 023D 10 01          BPL   GODEC
2210: 023F 60       NODEC  RTS               ; LEAVE CHARACTER UNKNOWN
2220: 0240 C9 3A    GODEC  CMPIM $3A
2230: 0242 10 FB          BPL   NODEC
2240: 0244 A6 7D          LDX   NUMCAR       ; IT IS DECIMAL
2250: 0246 D0 08          BNE   NOTFRS
2260: 0248 A0 00          LDYIM $00          ; FIRST DIGIT CLEARS
2270: 024A 84 F9          STY   DATA         ; NUMBER
2280: 024C 84 FA          STY   DATA   +01
2290: 024E 84 FB          STY   DATA   +02
2300: 0250 38       NOTFRS SEC
2310: 0251 E9 30          SBCIM '0           ; OBTAIN VALUE
2320: 0253 2A             ROLA               ; DIGIT LEFT POSITIONED
2330: 0254 2A             ROLA               ; IN ACCUMULATOR
2340: 0255 2A             ROLA
2350: 0256 2A             ROLA
2360: 0257 A2 04          LDXIM $04
2370: 0259 2A       ROLWER ROLA              ; SHIFT DIGIT IN
2380: 025A 26 F9          ROL   DATA
2390: 025C 26 FA          ROL   DATA   +01
2400: 025E 26 FB          ROL   DATA   +02
2410: 0260 CA             DEX
2420: 0261 D0 F6          BNE   ROLWER
2430: 0263 E6 7D          INC   NUMCAR
2440: 0265 A5 7D          LDA   NUMCAR
2450: 0267 C9 07          CMPIM $07          ; TEST IF TOO MANY DIGITS
2460: 0269 30 A3          BMI   WERINP
2470: 026B 20 A8 02       JSR   ERROR
2480: 026E 4C 00 02       JMP   INPUT
2490:
2500:
```

```
2510:                    *
2520:                    * * * SUBROUTINE TO READ A
2530:                    *      CHARACTER FROM KIM OR TTY
2540:                    *      OUTPUT IS IN ASCII
2550:                    *
2560: 0271 A9 01         INCHAR LDAIM $01
2570: 0273 2C 40 17             BIT   PIADAT      ; TEST IF KIM
2580: 0276 F0 16                BEQ   TTYIN
2590: 0278 20 1F 1F      PUNTA  JSR   SCANDS      ; WAIT FOR NO KEY
2600: 027B D0 FB                BNE   PUNTA
2610: 027D 20 1F 1F      PUNTB  JSR   SCANDS      ; WAIT FOR A KEY
2620: 0280 F0 FB                BEQ   PUNTB
2630: 0282 20 6A 1F             JSR   GETKEY
2640: 0285 C9 15                CMPIM $15         ; IGNORE IT IF
2650: 0287 10 EF                BPL   PUNTA       ; BOUNCE
2660: 0289 AA                   TAX
2670: 028A BD FD 03             LDAAX ASCTAB      ; CONVERT TO ASCII
2680: 028D 60                   RTS
2690: 028E 20 5A 1E      TTYIN  JSR   GETCH       ; TTY IS EASIER
2700: 0291 60                   RTS
2710:                    *
2720:                    * * * OUTPUT NUMBER FROM
2730:                    *      DATA AREA TO TTY IF CONNECTED
2740:                    *
2750: 0292 A9 01         OUTPUT LDAIM $01
2760: 0294 2C 40 17             BIT   PIADAT
2770: 0297 F0 01                BEQ   ITSTTY
2780: 0299 60                   RTS
2790: 029A A2 02         ITSTTY LDXIM $02
2800: 029C B5 F9         WTYP   LDAAX DATA
2810: 029E 20 3B 1E             JSR   PRIBYT
2820: 02A1 CA                   DEX
2830: 02A2 10 F8                BPL   WTYP
2840: 02A4 20 2F 1E      OUTYP  JSR   CRLF
2850: 02A7 60                   RTS
2860:                    *
2870:                    * * * ERROR SUBROUTINE
2880:                    *
2890: 02A8 A9 01         ERROR  LDAIM $01
2900: 02AA 2C 40 17             BIT   PIADAT
2910: 02AD F0 0A                BEQ   TTYERR
2920: 02AF A2 02                LDXIM SIZEA
2930: 02B1 A9 FF                LDAIM $FF
2940: 02B3 95 7F         SETFUL STAAX ACCU
2950: 02B5 CA                   DEX
2960: 02B6 10 FB                BPL   SETFUL
2970: 02B8 60                   RTS
2980: 02B9 A9 3F         TTYERR LDAIM VRAAG
2990: 02BB 20 A0 1E             JSR   OUTCH
3000: 02BE 4C A4 02             JMP   OUTYP
```

```
3010: 0300                    ORG   $0300
3020:                 * * * INTEGER PACKAGE 'INTCAL'
3030:                 *     #770110
3040:                 *
3050:                 *     COPYRIGHT (C) 1977, 1982
3060:                 *     WESTVRIES COMPUTER CONSULTING B.V.
3070:                 *     P.O. BOX 20
3080:                 *     OOSTZAAN
3090:                 *     THE NETHERLANDS
3100:                 *
3110:                 * * * FUNCTIONS PROVIDED:
3120:                 *     LOAD, STORE, ADD, SUBTRACT,
3130:                 *     MULTIPLY, DIVIDE
3140:                 *
3150: 0300 86 8B      BEGALG STX   LOADAD      ; GENERAL SETUP AND
3160: 0302 84 8C             STY   LOADAD +01  ; INITIALIZE
3170: 0304 85 8D             STA   ACCSAV
3180: 0306 A2 02             LDXIM SIZEA
3190: 0308 A0 00             LDYIM $00
3200: 030A 94 82      CLRWER STYZX ACCLSB
3210: 030C CA                DEX
3220: 030D 10 FB             BPL   CLRWER
3230: 030F A2 02             LDXIM SIZEA
3240: 0311 F8                SED
3250: 0312 60                RTS
3260: 0313 20 00 03   LOAD   JSR   BEGALG      ; LOAD INTO
3270: 0316 B1 8B      NLOAD  LDAIY LOADAD      ; ACCU
3280: 0318 99 7F 00          STAAY ACCU
3290: 031B C8                INY
3300: 031C CA                DEX
3310: 031D 10 F7             BPL   NLOAD
3320: 031F D8         ALGOUT CLD               ; GENERAL EXIT
3330: 0320 A6 8B             LDX   LOADAD      ; RESTORE REGISTERS
3340: 0322 A4 8C             LDY   LOADAD +01
3350: 0324 A5 8D             LDA   ACCSAV
3360: 0326 60                RTS
3370: 0327 20 00 03   STORE  JSR   BEGALG      ; STORE FROM
3380: 032A B9 7F 00   NSTOR  LDAAY ACCU        ; ACCU
3390: 032D 91 8B             STAIY LOADAD
3400: 032F C8                INY
3410: 0330 CA                DEX
3420: 0331 10 F7             BPL   NSTOR
3430: 0333 30 EA             BMI   ALGOUT
3440: 0335 20 00 03   ADD    JSR   BEGALG      ; ADD INTO
3450: 0338 18                CLC               ; ACCU
3460: 0339 B9 7F 00   NADD   LDAAY ACCU
3470: 033C 71 8B             ADCIY LOADAD
3480: 033E 99 7F 00          STAAY ACCU
3490: 0341 C8                INY
3500: 0342 CA                DEX
```

```
3510: 0343 10 F4          BPL   NADD
3520: 0345 30 D8          BMI   ALGOUT
3530: 0347 20 00 03 SUB   JSR   BEGALG     ; SUBTRACT FROM
3540: 034A 38             SEC               ; ACCU
3550: 034B B9 7F 00 NSUB  LDAAY ACCU
3560: 034E F1 8B          SBCIY LOADAD
3570: 0350 99 7F 00       STAAY ACCU
3580: 0353 C8             INY
3590: 0354 CA             DEX
3600: 0355 10 F4          BPL   NSUB
3610: 0357 B0 03          BCS   CLICAR
3620: 0359 38       SETCAR SEC
3630: 035A B0 C3          BCS   ALGOUT
3640: 035C 18       CLICAR CLC
3650: 035D 90 C0          BCC   ALGOUT
3660: 035F 86 8B    MPY   STX   LOADAD
3670: 0361 84 8C          STY   LOADAD +01
3680: 0363 85 8D          STA   ACCSAV
3690: 0365 A2 06          LDXIM SIZEB
3700: 0367 B5 7E    WIMPY LDAAX ACCU   -01
3710: 0369 95 84          STAAX DACCU  -01
3720: 036B A9 00          LDAIM $00
3730: 036D 95 7E          STAAX ACCU   -01
3740: 036F CA             DEX
3750: 0370 D0 F5          BNE   WIMPY
3760: 0372 A8             TAY
3770: 0373 A9 03          LDAIM SIZE
3780: 0375 85 8F          STA   MULCNT
3790: 0377 F8             SED
3800: 0378 B1 8B    OUTLUP LDAIY LOADAD
3810: 037A 85 8E          STA   MULIND
3820: 037C F0 1C          BEQ   NOAD
3830: 037E 18       PEUTER CLC
3840: 037F A9 06          LDAIM SIZEB
3850: 0381 85 90          STA   COUNT
3860: 0383 A2 00          LDXIM $00
3870: 0385 B5 7F    WERADD LDAAX ACCU
3880: 0387 75 85          ADCAX DACCU
3890: 0389 95 7F          STAAX ACCU
3900: 038B E8             INX
3910: 038C C6 90          DEC   COUNT
3920: 038E D0 F5          BNE   WERADD
3930: 0390 B0 8D    ULGO  BCS   ALGOUT
3940: 0392 A5 8E          LDA   MULIND
3950: 0394 E9 00          SBCIM $00
3960: 0396 85 8E          STA   MULIND
3970: 0398 D0 E4          BNE   PEUTER
3980: 039A A2 05    NOAD  LDXIM SIZEC
3990: 039C B5 84    WUSTUR LDAAX DACCU  -01
4000: 039E 95 85          STAAX DACCU
```

```
4010: 03A0 CA            DEX     *
4020: 03A1 D0 F9         BNE     WUSTUR
4030: 03A3 86 85         STX     DACCU
4040: 03A5 C8            INY
4050: 03A6 C6 8F         DEC     MULCNT
4060: 03A8 D0 CE         BNE     OUTLUP
4070: 03AA F0 B0    PULGO BEQ    CLICAR
4080: 03AC 86 8B    DVI   STX    LOADAD
4090: 03AE 84 8C          STY    LOADAD +01
4100: 03B0 85 8D          STA    ACCSAV
4110: 03B2 A2 03          LDXIM  SIZE
4120: 03B4 86 8E          STX    MULIND
4130: 03B6 A2 05          LDXIM  SIZEC
4140: 03B8 B5 7F    MOVDIV LDAAX ACCU
4150: 03BA 95 85          STAAX  DACCU
4160: 03BC A9 00          LDAIM  $00
4170: 03BE 95 7F          STAAX  ACCU
4180: 03C0 CA             DEX
4190: 03C1 10 F5          BPL    MOVDIV
4200: 03C3 A0 02    DIVLUP LDYIM SIZEA
4210: 03C5 A6 8E          LDX    MULIND
4220: 03C7 B5 87    TESWER LDAAX DACLSB
4230: 03C9 D1 8B          CMPIY  LOADAD
4240: 03CB 90 29          BCC    FINDIV
4250: 03CD B5 87          LDAAX  DACLSB
4260: 03CF F0 21          BEQ    NOCOMP
4270: 03D1 A6 8E          LDX    MULIND
4280: 03D3 A0 00          LDYIM  $00
4290: 03D5 A9 03          LDAIM  SIZE
4300: 03D7 85 8F          STA    MULCNT
4310: 03D9 F8             SED
4320: 03DA B5 85    DIVRE LDAAX  DACCU
4330: 03DC F1 8B          SBCIY  LOADAD
4340: 03DE 95 85          STAAX  DACCU
4350: 03E0 E8             INX
4360: 03E1 C8             INY
4370: 03E2 C6 8F          DEC    MULCNT
4380: 03E4 D0 F4          BNE    DIVRE
4390: 03E6 B5 7C          LDAAX  ACCMSB
4400: 03E8 C9 99          CMPIM  $99
4410: 03EA B0 A4          BCS    ULGO
4420: 03EC 69 01          ADCIM  $01
4430: 03EE 95 7C          STAAX  ACCMSB
4440: 03F0 D0 D1          BNE    DIVLUP
4450: 03F2 CA       NOCOMP DEX
4460: 03F3 88             DEY
4470: 03F4 10 D1          BPL    TESWER
4480: 03F6 C6 8E    FINDIV DEC   MULIND
4490: 03F8 10 C9          BPL    DIVLUP
4500: 03FA 4C 5C 03       JMP    CLICAR
```

```
4510: 03FD 30      ASCTAB =     '0*        ; 0
4520: 03FE 31             =     '1         ; 1
4530: 03FF 32             =     '2         ; 2
4540: 0400 33             =     '3         ; 3
4550: 0401 34             =     '4         ; 4
4560: 0402 35             =     '5         ; 5
4570: 0403 36             =     '6         ; 6
4580: 0404 37             =     '7         ; 7
4590: 0405 38             =     '8         ; 8
4600: 0406 39             =     '9         ; 9
4610: 0407 2B             =     PLUS       ; A
4620: 0408 2D             =     MIN        ; B
4630: 0409 2A             =     MAAL       ; C
4640: 040A 2F             =     DEEL       ; D
4650: 040B 43             =     CLRNUM     ; E
4660: 040C 41             =     CLRALL     ; F
4670: 040D 52             =     REP        ; AD
4680: 040E 49             =     MEMIN      ; DA
4690: 040F 4F             =     MEMOUT     ; PC
4700: 0410 25             =     PRCNT      ; +
4710: 0411 41             =     CLRALL     ; GO
```