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PP 5655-EC6 IBM Enterprise COBOL for z/OS  6.2.0 P180305                Date 09/17/2018  Time 11:52:46   Page     1

Invocation parameters:
 OPTFILE

PROCESS(CBL) statements:
 cbl apost
 cbl optimize(1)
 cbl list
 cbl test(ejpd)
 cbl ssrange(msg)

PP 5655-EC6 IBM Enterprise COBOL for z/OS  6.2.0 P180305       TESTINDX  Date 09/17/2018  Time 11:52:46   Page     4
  LineID  PL SL  ----+-*A-1-B--+----2----+----3----+----4----+----5----+----6----+----7-!--+----8 Map and Cross Reference

  000001                Identification division.
  000002                Program-id. TestIndx.
  000003                Environment division.
  000004                Data division.
  000005                Working-storage section.
  000006                01 ALL-INDICES USAGE BINARY SYNCHRONIZED.                                  000000000 0CL8
  000007                    05 INDICE1 PIC S9(4).                                                 000000000 1H
  000008                    05 INDICE2 PIC S9(4).                                                 000000002 1H
  000009                    05 INDICE3 PIC S9(4).                                                 000000004 1H
  000010                    05 INDICE4 PIC S9(4).                                                 000000006 1H
  000011                01  ATABLE.                                                               000000000 0CL1400
  000012                    05  ROWINTABLE OCCURS 100                                            000000000 0CL14
  000013                        indexed by x-INDICE1, x-INDICE3.  *> auto-indexing

  000014                      10 DATA1 PIC X(10).                                                 000000000 10C
  000015                      10 DATA2 PIC S9(4).                                                 00000000A 4C
  000016                Procedure division.
  000017                Main.
  000018                    Continue
  000019                    .
  000020                A.
  000021                    MOVE 1 TO INDICE1                                          7
  000022                    set x-INDICE1 to 1  *> auto-indexing                       13
  000023                    MOVE 100 TO INDICE2                                        8
  000024                    .
  000025                B.
  000026                    IF INDICE1 > INDICE2                                       7 8
  000027      1               GO TO C                                                  35
  000028                    END-IF
  000029                    MOVE 'test' TO DATA1 (x-INDICE1)  *> auto-indexing         14 13
  000030                    MOVE INDICE1 TO DATA2 (x-INDICE1)  *> auto-indexing        7 15 13
  000031                    ADD 1 TO INDICE1                                           7
  000032                    set x-INDICE1 up by 1  *> auto-indexing                    13
  000033                    GO TO B                                                    25
  000034                    .
  000035                C.
  000036                    CONTINUE.
  000037               *
  000038                Loop-from-zero.
  000039                    set x-INDICE3 to 0  *> auto-indexing                       13

==000039==> IGYPS2083-E "0" was found as the sender in a "SET" statement.  A value of "1" was
                        assumed.

  000040                    PERFORM VARYING INDICE3 FROM 0 BY 1                        9
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000041                          UNTIL INDICE3 >= INDICE2                                 9 8
000042      1                MOVE 'other' TO DATA1 (x-INDICE3 + 1)  *> auto-indexing     14 13
000043      1                MOVE INDICE3 TO DATA2 (x-INDICE3 + 1)  *> auto-indexing     9 15 13
000044      1                set x-INDICE3 up by 1  *> auto-indexing                     13
000045                   END-PERFORM
000046                   .
000047               Bye.
000048                   Goback
000049                   .
000050               End program TestIndx.                                                2
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 000002:         Program-id. TestIndx.
…
    000174                      000021  USER-ENTRY: EQU     *
 000021:             MOVE 1 TO INDICE1
    000174  E544 9018 0001      000021              MVHHI   24(,R9),X'0001'       £  INDICE1
 000022:             set x-INDICE1 to 1  *> auto-indexing
    00017A  E54C 8000 0000      000022              MVHI    0(,R8),X'0000'        £
 000023:             MOVE 100 TO INDICE2
    000180  E544 901A 0064      000023              MVHHI   26(,R9),X'0064'       £  INDICE2
    000186                      000023  B:          EQU     *
 000029 :            MOVE 'test' TO DATA1 (x-INDICE1)  *> auto-indexing
    000186                      000029  L0006:      EQU     *
    000186  BF2F 8000           000029              ICM     R2,X'f',0(R8)         £
    00018A  A744 00C7           000029              JL      L0048
    00018E  A72E 0578           000029              CHI     R2,0x578
    000192  A7A4 00C3           000029              JNL     L0048
    000196                      000029  L0049:      EQU     *
    000196  4140 9020           000029              LA      R4,32(,R9)            £
    00019A  4152 4000           000029              LA      R5,0(R2,R4)           £  DATA1
    00019E  D209 5000 30A2      000029              MVC     0(10,R5),162(R3)      £                          +162
 000030:             MOVE INDICE1 TO DATA2 (x-INDICE1)  *> auto-indexing
    0001A4  5040 D0F4           000030              ST      R4,244(,R13)          £
    0001A8  1222                000030              LTR     R2,R2
    0001AA  A744 00AB           000030              JL      L0052
    0001AE  A72E 0578           000030              CHI     R2,0x578
    0001B2  A7A4 00A7           000030              JNL     L0052
    0001B6                      000030  L0053:      EQU     *
    0001B6  4840 9018           000030              LH      R4,24(,R9)            £  INDICE1
    0001BA  4E40 D150           000030              CVD     R4,336(,R13)          £
    0001BE  940F D155           000030              NI      341(,R13),X'0F'       £
    0001C2  F822 D155 D155      000030              ZAP     341(3,R13),341(3,R13) £
    0001C8  F332 500A D155      000030              UNPK    10(4,R5),341(3,R13)   £
 000031:             ADD 1 TO INDICE1
    0001CE  A74A 0001           000031              AHI     R4,0x1
    0001D2  4040 9018           000031              STH     R4,24(,R9)            £  INDICE1
 000032:             set x-INDICE1 up by 1  *> auto-indexing
    0001D6  A72A 000E           000032              AHI     R2,0xe
    0001DA  5020 8000           000032              ST      R2,0(,R8)             £
    0001DE  B927 0044           000031              LHR     R4,R4
 000026:             IF INDICE1 > INDICE2
    0001E2  4820 901A           000026              LH      R2,26(,R9)            £  INDICE2
    0001E6  EC24 FFD0 A076      000026              CRJ     R2,R4,L0006,(mask=0xa),
    0001EC                      000035  C:          EQU     *
 000039:             set x-INDICE3 to 0  *> auto-indexing
    0001EC  E54C 8004 0000      000039              MVHI    4(,R8),X'0000'        £
                                                >>> MVHI    4(,R8),X'FFF2'        £ -14
 000040:             PERFORM VARYING INDICE3 FROM 0 BY 1
    0001F2  E544 901C 0000      000040              MVHHI   28(,R9),X'0000'       £
 000045:             END-PERFORM
    0001F8  4840 901C           000045              LH      R4,28(,R9)            £  INDICE3
    0001FC  4820 901A           000045              LH      R2,26(,R9)            £  INDICE2
    000200  EC24 0035 C076      000045              CRJ     R2,R4,L0007,(mask=0xc),
 000042:             MOVE 'other' TO DATA1 (x-INDICE3 + 1)  *> auto-indexing
    000206                      000042  L0008:      EQU     *
    000206  5820 8004           000042              L       R2,4(,R8)             £
    00020A  A72A 000E           000042              AHI     R2,0xe          ← set up by 1
    00020E  1222                000042              LTR     R2,R2
    000210  A744 006B           000042              JL      L0064
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    000214  A72E 0578          000042            CHI     R2,0x578
    000218  A7A4 0067          000042            JNL     L0064
    00021C                     000042  L0065:    EQU     *
    00021C  4140 9020          000042            LA      R4,32(,R9)            £
    000220  4152 4000          000042            LA      R5,0(R2,R4)           £  DATA1
    000224  D209 5000 30AC     000042            MVC     0(10,R5),172(R3)      £                              +172
 000043:                MOVE INDICE3 TO DATA2 (x-INDICE3 + 1)  *> auto-indexing
    00022A  1222               000043            LTR     R2,R2
    00022C  A744 0051          000043            JL      L0068
    000230  A72E 0578          000043            CHI     R2,0x578
    000234  A7A4 004D          000043            JNL     L0068
    000238                     000043  L0069:    EQU     *
    000238  4840 901C          000043            LH      R4,28(,R9)            £  INDICE3
    00023C  4E40 D150          000043            CVD     R4,336(,R13)          £
    000240  940F D155          000043            NI      341(,R13),X'0F'       £
    000244  F822 D155 D155     000043            ZAP     341(3,R13),341(3,R13) £
    00024A  F332 500A D155     000043            UNPK    10(4,R5),341(3,R13)   £
 000044:                set x-INDICE3 up by 1  *> auto-indexing
    000250  5020 8004          000044            ST      R2,4(,R8)             £
    000254  A74A 0001          000045            AHI     R4,0x1
    000258  4040 901C          000045            STH     R4,28(,R9)            £  INDICE3
    00025C  B927 0044          000045            LHR     R4,R4
    000260  4820 901A          000045            LH      R2,26(,R9)            £  INDICE2
    000264  EC24 FFD1 2076     000045            CRJ     R2,R4,L0008,(mask=0x2),
    00026A                     000045  L0007:    EQU     *
 000048:            Goback
…
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