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* 12/31/06 RPI 523 CODE DEMOMAIN CALLING DEMOSUB1/DEMOSUB2
* 01/08/07 RPI 523 ADD TIMING IN MICRO-SEC AND PERFORM TWICE
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* 1. DEMOMAIN CALLS DEMOSUB1 TO CALCULATE AND DISPLAY SUM OF 2
  DISPLAY SCIENTIFIC NOTATION VALUES USING CFD AND CTD MACROS.
  FOR CONVERSION TO/FROM LD EXTENDED DFP FORMAT FOR ADDITION
* 2. DEMOMAIN CALLS DEMOSUB2 TO CALCULATE AND DISPLAY SUM OF 2
  INTEGER VALUES.
* 3. RUN SOA\DEMO\DEMOSTD.BAT TO ASSEMBLE, STATICALLY LINK, AND
  EXECUTE DEMO APPLICATION AS STANDARD LOCAL SINGLE PROCESS.
* 4. RUN SOA\DEMO\DEMOSOA.BAT TO GENERATED, ASSEMBLE, LINK, AND
  EXECUTE DEMO APPLICAITON USING SOA CLIENT SERVER TO ALLOW
  RUNNING THE TWO CALLED SUBROUTINES AS SERVICES RUNNING ON
  SEPARATE PROCESS ON SAME OR ANY TCP/IP CONNECTED PLATFORM.
*************************
   COPY ASMMSP
DEMOMAIN SUBENTRY
   WTO 'DEMOMAIN SERVICE ORIENTED ARCHITECTURE APPLICATION'
  ZAP COUNT,=P'5'
  DO WHILE=(SP,COUNT,P,=P'0')
   BAL R12,START TIME
   CALL DEMOSUB1,(DFP1,DFP2,DFP3),VL
   MVC DSUM1.DFP3
   WTO MF=(E,WTOMSG1)
   BAL R12,STOP_TIME
   IF (CLC,DFP3,NE,DFP4)
      WTO 'DEMOMAIN DEMOSUB1 DFP SUM INVALID - ABORTING'
      ABEND 111
   ENDIF
   BAL R12,START_TIME
   CALL DEMOSUB2,(INT1,INT2,INT3),VL
      R0,INT3
   CVD R0,PWORK
   MVC DSUM2,MASK2
   ED DSUM2,PWORK+4
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WTO MF=(E.WTOMSG2)
    BAL R12,STOP TIME
    IF (CLC,INT3,NE,INT4)
      WTO 'DEMOMAIN DEMOSUB2 INT SUM INVALID - ABORTING'
      ABEND 111
    ENDIF
    SP COUNT,=P'1'
  ENDDO
    WTO 'DEMOMAIN ENDED OK'
    SUBEXIT
START_TIME DS 0H
    TIME NS,NS START
    BR R12
STOP TIME DS 0H SHOW SRERVICE TIME IN MICRO-SECONDS
    TIME NS,NS_STOP
    LG R1,NS STOP
    SG R1,NS START
    DSG R0,=FD'1000'
   CVD R1,PWORK
    MVC DMICS,MICS MASK
    ED DMICS,PWORK+3
    WTO MF=(E,SHOW MSG)
    BR R12
NS START DC D'0' START TOD IN NANO-SECONDS
NS STOP DC D'0' END TOD IN NANO-SECONDS
SHOW MSG DC AL2(SHOW END-*,0), C'SERVICE TIME IN MIRCO-SEC ='
DMICS DC C'ZZZ,ZZZ,ZZZ'
SHOW END EOU *
MICS_MASK DC X'40202020',C',',X'202020',C',',X'202120'
    LTORG
COUNT DC PL4'0'
WTOMSG1 DC AL2(WTOEND1-*,0),C'DEMOMAIN DEMOSUB1 DFP SUM='
DSUM1 DC CL45''
WTOEND1 EQU *
WTOMSG2 DC AL2(WTOEND2-*,0),C'DEMOMAIN DEMOSUB2 INT SUM='
DSUM2 DC C'Z,ZZZ,ZZZ'
WTOEND2 EQU *
MASK2 DC C' ',X'20',C',',X'202020',C',',X'202120'
PWORK DC PL8'0'
DFP1 DC CL45'1.1'
DFP2 DC CL45'2.2'
DFP3 DC CL45''
DFP4 DC CL45'3.3' VERIFY SUM VALUE
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INT1 DC F'1'
INT2 DC F'2'
INT3 DC F'0'
INT4 DC F'3'
EQUREGS
END