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000001** IDENTIFICATION DIVISION.
000002** PROGRAM-ID. JMDUMPER
000003** AUTHOR. JOHN MYCROFT
000004** * THIS PROGRAM CREATES A KSDS AND DUMPS.
000005** * EACH RECORD IS VARIABLE LENGTH AND CONTAINS AN 8 BYTE KEY,
000006** * A 2 BYTE NUMBER FOR THE OCCURS DEPENDING AND UP TO 497
000007** * HALFWORDS, EACH OF WHICH HAS A VALUE 1 GREATER THAN THE
000008** * PREVIOUS ONE.
000009** ENVIRONMENT DIVISION.
000010** INPUT-OUTPUT SECTION.
000011** FILE-CONTROL.
000012** SELECT CARDFILE ASSIGN TO SYS004-UR-2501-S.
000013** SELECT INFILE
000014** ASSIGN TO SYS007-DA-3330-INFILE
000015** ORGANIZATION IS INDEXED
000016** ACCESS IS SEQUENTIAL
000017** FILE STATUS IS VSAM-STATUS
000018** RECORD KEY IS INFILE-KEY.
000019** SELECT MASKSDS
000020** ASSIGN TO SYS007-DA-3330-MASKSDS
000021** ORGANIZATION IS INDEXED
000022** ACCESS IS SEQUENTIAL
000023** FILE STATUS IS VSAM-STATUS
000024** RECORD KEY IS MASKSDS-KEY.
000043** DATA DIVISION.
000044** FILE SECTION.
000045** FD CARDFILE
000046** RECORD CONTAINS 80 CHARACTERS
000047** RECORDING MODE F
000048** LABEL RECORDS ARE OMITTED.
000049** 01 CARD-AREA. BLF=0000+000 0CL80
000050** 05 CARD-STUFF PIC X(80). BLF=0000+000,0000000 80C
000051** FD MASKSDS
000052** RECORD CONTAINS 1004 TO 1004 CHARACTERS
000053** DATA RECORD IS MASKSDS-REC.
000054** 01 MASKSDS-REC. BLF=0001+000 0CL1004
000055** 02 MASKSDS-KEY PIC X(8). BLF=0001+000,0000000 8C
000056** 02 MASKSDS-OCCURS PIC S9(4) COMP SYNC. BLF=0001+008,0000008 1H
000057** 02 MASKSDS-DATA. BLF=0001+00A,000000A 0CL994
000058** 03 MASKSDS-FIELD PIC S9(4) COMP SYNC BLF=0001+00A,000000A 1H
000059** OCCURS 497 INDEXED BY V-1. IDX=0001+000
000060** FD INFILE
000061** RECORD CONTAINS 366 TO 366 CHARACTERS
000062** DATA RECORD IS INFILE-REC.
000063** 01 INFILE-REC. BLF=0002+000 0CL366
000064** 02 INFILE-KEY PIC X(8). BLF=0002+000,0000000 8C
000065** 02 FILLER PIC X(18). BLF=0002+008,0000008 18C
000066** 02 INFILE-FIRST-NAME PIC X(16). BLF=0002+01A,000001A 16C
000067** 02 INFILE-LAST-NAME PIC X(32). BLF=0002+02A,000002A 32C
000068** 02 FILLER PIC X(8). BLF=0002+04A,000004A 8C
000069** 02 INFILE-BALANCE PIC S9(9) COMP-3. BLF=0002+052,0000052 5P
000070** 02 FILLER PIC X(12). BLF=0002+057,0000057 12C
000071** 02 INFILE-PAYMENT PIC S9(9) COMP-3. BLF=0002+063,0000063 5P

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000072**	02	FILLER	PIC X(04).	BLF=0002+068,0000068	4C
000073**	02	INFILE-INDEX	PIC 9(4) COMP.	BLF=0002+06C,000006C	2C
000074**	02	INFILE-MORE-STUFF	PIC X(256).	BLF=0002+06E,000006E	256C
000102**		WORKING-STORAGE SECTION.			
000103**	01	TEST-AREA.		BLW=0000+000	0CL5600
000104**	02	TEST-C	PIC X(20) OCCURS 100.	BLW=0000+000,0000000	20C
000107**	01	CARD-REC.		BLW=0001+5E0	0CL80
000108**	05	CARD-TYPE	PIC X.	BLW=0001+5E0,0000000	1C
000109**	05	CARD-COUNT	PIC 9(5).	BLW=0001+5E1,0000001	5C
000110**	05	CARD-KEY	PIC X(4).	BLW=0001+5E6,0000006	4C
000111**	05	CARD-KEY2	PIC X(8).	BLW=0001+5EA,000000A	8C
000112**	05	FILLER	PIC X(62).	BLW=0001+5F2,0000012	62C
000116**	01	MISC-FIELDS.		BLW=0002+0F0	0CL14
000117**	02	VSAM-STATUS	PIC XX VALUE '00'.	BLW=0002+0F0,0000000	2C
000118**	02	WORK-KEY	PIC S9(8) COMP SYNC VALUE +0.	BLW=0002+0F4,0000004	1F
000119**	02	HIGH-KEY	PIC S9(8) COMP SYNC VALUE +0.	BLW=0002+0F8,0000008	1F
000120**	02	FIELD-COUNTER	PIC S9(4) COMP SYNC VALUE +0.	BLW=0002+0FC,000000C	1H
000121**	01	OCCURS-TABLE.		BLW=0002+100	0CL8
000122**	02	FILLER	PIC S9(4) COMP SYNC VALUE +5.	BLW=0002+100,0000000	1H
000123**	02	FILLER	PIC S9(4) COMP SYNC VALUE +10.	BLW=0002+102,0000002	1H
000124**	02	FILLER	PIC S9(4) COMP SYNC VALUE +15.	BLW=0002+104,0000004	1H
000125**	02	FILLER	PIC S9(4) COMP SYNC VALUE +20.	BLW=0002+106,0000006	1H
000126**	01	FILLER REDEFINES OCCURS-TABLE.		BLW=0002+100	0CL8
000127**	02	OCCURS-VALUE OCCURS 4 TIMES	PIC S9(4) COMP SYNC.	BLW=0002+100,0000000	1H
000128**	01	OCCURS-LIMIT	PIC S9(4) COMP SYNC VALUE +4.	BLW=0002+108	1H
000129**	01	OCCURS-INDEX	PIC S9(4) COMP SYNC VALUE +0.	BLW=0002+110	1H
000130**	01	MORE-STUFF.		BLW=0002+118	0CL7
000131**	05	FIELD-COUNTER-TWO	PIC S9(7) COMP-3 VALUE +0.	BLW=0002+118,0000000	4P
000132**	05	ARE-THERE-MORE-RECORDS	PIC XXX VALUE 'YES'.	BLW=0002+11C,0000004	3C
000135**		PROCEDURE DIVISION.			
000136**		MAIN-SECTION SECTION.			
000137**		PERFORM PROCESS-CARDFILE.			
000138**		PERFORM PROCESS-KSDS-FILE.			
000139**		STOP RUN.			
000143**		PROCESS-CARDFILE SECTION.			
000145**		OPEN INPUT CARDFILE.			
000147**		OPEN INPUT INFILE.			
000148**		READ CARDFILE INTO CARD-REC END			
000149**	1	MOVE 'NO' TO ARE-THERE-MORE-RECORDS.			
000153**		PROCESS-CARD-EXIT.			
000154**		EXIT.			
000159**		PROCESS-KSDS-FILE SECTION.			
000160**		MOVE 5 TO HIGH-KEY.			
000161**		MOVE 0 TO WORK-KEY FIELD-COUNTER.			
000163**		DISPLAY 'OPENING MASKSDS' UPON CONSOLE.			
000164**		OPEN OUTPUT MASKSDS.			
000165**		MOVE +0 TO OCCURS-INDEX.			
000166**		PERFORM PROCESS-KSDS-LOOP.			
000167**		MOVE +99 TO OCCURS-INDEX.			
000168**		PROCESS-KSDS-LOOP.			
000169**		READ INFILE.			
000181**		ADD INFILE-PAYMENT TO INFILE-BALANCE.			
000182**		WRITE MASKSDS-REC.			

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000188**          GO TO PROCESS-KSDS-LOOP.
000189**          FILL-IN-MASKSDS.
000190**          ADD 1 TO FIELD-COUNTER.
000194**          CLOSE-MASKSDS.
000196**          CLOSE MASKSDS.
000203**          PROCESS-KSDS-EXIT.
000204**          EXIT.

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Data Division Map

LineID	Data Name	Locator	Blk	Structure	Definition	Data Type	Attributes
2	PROGRAM-ID JMDUMPER	-----					*
45	FD CARDFILE.					SAM	F
49	01 CARD-AREA	BLF=0000	000		DS 0CL80	Group	
50	02 CARD-STUFF	BLF=0000	000	0 000 000	DS 80C	Display	
51	FD MASKSDS					VSAM	F
54	01 MASKSDS-REC	BLF=0001	000		DS 0CL1004	Group	
55	02 MASKSDS-KEY	BLF=0001	000	0 000 000	DS 8C	Display	
56	02 MASKSDS-OCCURS	BLF=0001	008	0 000 008	DS 1H	Binary	
57	02 MASKSDS-DATA	BLF=0001	00A	0 000 00A	DS 0CL994	Group	
58	03 MASKSDS-FIELD	BLF=0001	00A	0 000 00A	DS 1H	Binary	O
59	V-1	IDX=0001	000			Index-Name	
60	FD INFILE.					VSAM	F
63	01 INFILE-REC	BLF=0002	000		DS 0CL366	Group	
64	02 INFILE-KEY	BLF=0002	000	0 000 000	DS 8C	Display	
65	02 FILLER	BLF=0002	008	0 000 008	DS 18C	Display	
66	02 INFILE-FIRST-NAME	BLF=0002	01A	0 000 01A	DS 16C	Display	
67	02 INFILE-LAST-NAME	BLF=0002	02A	0 000 02A	DS 32C	Display	
68	02 FILLER	BLF=0002	04A	0 000 04A	DS 8C	Display	
69	02 INFILE-BALANCE	BLF=0002	052	0 000 052	DS 5P	Packed-Dec	
70	02 FILLER	BLF=0002	057	0 000 057	DS 12C	Display	
71	02 INFILE-PAYMENT	BLF=0002	063	0 000 063	DS 5P	Packed-Dec	
72	02 FILLER	BLF=0002	068	0 000 068	DS 4C	Display	
73	02 INFILE-INDEX	BLF=0002	06C	0 000 06C	DS 2C	Binary	
74	02 INFILE-MORE-STUFF	BLF=0002	06E	0 000 06E	DS 256C	Display	
103	01 TEST-AREA	BLW=0000	000		DS 0CL5600	Group	
104	02 TEST-C	BLW=0000	000	0 000 000	DS 20C	Display	O
107	01 CARD-REC	BLW=0001	5E0		DS 0CL80	Group	
108	02 CARD-TYPE	BLW=0001	5E0	0 000 000	DS 1C	Display	
109	02 CARD-COUNT	BLW=0001	5E1	0 000 001	DS 5C	Disp-Num	
110	02 CARD-KEY	BLW=0001	5E6	0 000 006	DS 4C	Display	
111	02 CARD-KEY2	BLW=0001	5EA	0 000 00A	DS 8C	Display	
112	02 FILLER	BLW=0001	5F2	0 000 012	DS 62C	Display	
116	01 MISC-FIELDS	BLW=0002	0F0		DS 0CL14	Group	
117	02 VSAM-STATUS	BLW=0002	0F0	0 000 000	DS 2C	Display	
118	02 WORK-KEY	BLW=0002	0F4	0 000 004	DS 1F	Binary	
119	02 HIGH-KEY	BLW=0002	0F8	0 000 008	DS 1F	Binary	
120	02 FIELD-COUNTER	BLW=0002	0FC	0 000 00C	DS 1H	Binary	
121	01 OCCURS-TABLE	BLW=0002	100		DS 0CL8	Group	
122	02 FILLER	BLW=0002	100	0 000 000	DS 1H	Binary	
123	02 FILLER	BLW=0002	102	0 000 002	DS 1H	Binary	
124	02 FILLER	BLW=0002	104	0 000 004	DS 1H	Binary	
125	02 FILLER	BLW=0002	106	0 000 006	DS 1H	Binary	
126	01 FILLER	BLW=0002	100		DS 0CL8	Group	R
127	02 OCCURS-VALUE	BLW=0002	100	0 000 000	DS 1H	Binary	O

128	01 OCCURS-LIMIT.	BLW=0002	108		DS 1H	Binary
129	01 OCCURS-INDEX.	BLW=0002	110		DS 1H	Binary
130	01 MORE-STUFF.	BLW=0002	118		DS 0CL7	Group
131	02 FIELD-COUNTER-TWO	BLW=0002	118	0 000 000	DS 4P	Packed-Dec
132	02 ARE-THERE-MORE-RECORDS.	BLW=0002	11C	0 000 004	DS 3C	Display

PROGRAM GLOBAL TABLE BEGINS AT LOCATION 0000F4 FOR 000034 BYTES

THE PGT CONTAINS 000001 CELL(S) FOR ADDRESSABILITY TO THE CGT

PBL1 AT LOCATION 000764 FOR LINE 2

LINE #	HEXLOC	VERB	LINE #	HEXLOC	VERB	LINE #	HEXLOC	VERB
000137	00083E	PERFORM	000138	00085A	PERFORM	000139	000876	STOP
000144	000884	DISPLAY	000145	000892	OPEN	000146	0008AA	DISPLAY
000147	0008B4	OPEN	000148	0008CE	READ	000149	000912	MOVE
000150	000918	IF	000151	000920	CALL	000152	000936	ADD
000154	000950	EXIT	000160	000956	MOVE	000161	00095C	MOVE
000162	000968	MOVE	000163	00096E	DISPLAY	000164	00097C	OPEN
000165	000996	MOVE	000166	00099C	PERFORM	000167	0009B4	MOVE
000169	0009BA	READ	000170	0009F8	MOVE	000171	0009FE	IF
000173	000A06	ADD	000174	000A1C	ADD	000175	000A32	IF
000176	000A3E	MOVE	000177	000A44	PERFORM	000180	000A86	MOVE
000181	000A8C	ADD	000182	000A9C	WRITE	000183	000AC0	IF
000184	000ACA	DISPLAY	000187	000AD8	GO	000188	000ADC	GO
000190	000AE6	ADD	000191	000AFC	IF	000192	000B08	MOVE
000193	000B0E	MOVE	000195	000B20	MOVE	000196	000B26	CLOSE
000197	000B44	IF	000198	000B4E	MOVE	000199	000B5A	DISPLAY
000201	000B68	MOVE	000204	000B74	EXIT			

*** TGT MEMORY MAP ***

TGTLOC
000000 72 BYTE SAVE AREA
000048 TGT IDENTIFIER
00004C NEXT AVAILABLE BYTE ADDRESS FOR CEL
000050 TGT LEVEL INDICATOR
000051 RESERVED - 3 SINGLE BYTE FIELDS
000054 32 BIT SWITCH
000058 POINTER TO RUNCOM
00005C POINTER TO COBVEC
000060 POINTER TO PROGRAM DYNAMIC BLOCK TABLE
000064 NUMBER OF FCB'S
000068 WORKING STORAGE LENGTH
00006C POINTER TO PREVIOUS TGT IN TGT CHAIN
000070 ADDRESS OF IGZESMG WORK AREA
000074 ADDRESS OF 1ST GETMAIN BLOCK (SPACE MGR)
000078 FULLWORD RETURN CODE
00007A RETURN CODE SPECIAL REGISTER
00007C SORT-RETURN SPECIAL REGISTER
00007E MERGE FILE NUMBER
000080 ADDRESS OF CEL COMMON ANCHOR AREA
000084 LENGTH OF TGT
000088 RESERVED - 1 SINGLE BYTE FIELD
000089 PROGRAM MASK USED BY THIS PROGRAM
00008A RESERVED - 2 SINGLE BYTE FIELDS
00008C NUMBER OF SECONDARY FCB CELLS
000090 LENGTH OF THE VN(VNI) VECTOR
000094 COUNT OF NESTED PROGRAMS IN COMPILE UNIT

000098 DDNAME FOR DISPLAY OUTPUT
 0000A0 SORT-CONTROL SPECIAL REGISTER
 0000A8 POINTER TO COM-REG SPECIAL REGISTER
 0000AC CALC ROUTINE REGISTER SAVE AREA
 0000E0 ALTERNATE COLLATING SEQUENCE TABLE PTR.
 0000E4 ADDRESS OF SORT G.N. ADDRESS BLOCK
 0000E8 ADDRESS OF PGT
 0000EC CURRENT INTERNAL PROGRAM NUMBER
 0000F0 POINTER TO 1ST IPCB
 0000F4 ADDRESS OF THE CLLE FOR THIS PROGRAM
 0000F8 POINTER TO ABEND INFORMATION TABLE
 0000FC POINTER TO TEST INFO FIELDS IN THE TGT
 000100 ADDRESS OF START OF COBOL PROGRAM
 000104 POINTER TO VN'S IN CGT
 000108 POINTER TO VN'S IN TGT
 00010C POINTER TO FIRST PBL IN THE PGT
 000110 POINTER TO FIRST FCB CELL
 000114 WORKING STORAGE ADDRESS
 000118 POINTER TO FIRST SECONDARY FCB CELL
 *** VARIABLE PORTION OF TGT ***
 00011C BACKSTORE CELL FOR SYMBOLIC REGISTERS
 00012C BASE LOCATORS FOR SPECIAL REGISTERS
 000134 BASE LOCATORS FOR WORKING-STORAGE
 000140 BASE LOCATORS FOR LINKAGE-SECTION
 000144 BASE LOCATORS FOR FILES
 00015C CLLE ADDR. CELLS FOR CALL LIT. SUB-PGMS.
 000160 VARIABLE NAME (VN) CELLS
 000174 INDEX CELLS
 000184 PERFORM SAVE CELLS
 000198 FCB CELLS
 0001B0 INTERNAL PROGRAM CONTROL BLOCKS
 0001C0 TEMPORARY STORAGE-2

TGT WILL BE ALLOCATED FOR 000001C8 BYTES
 // EXEC PGM=LNKEDT,SIZE=1M

JMDUMPER 720078 720078 7226C1

31 ANY SVA ELIGIBLE

JMDUMPER	720078	720078	000000	000000	SYSLNK	ANY	ANY
CEEBETBL	7216A8	7216A8	001630	001630	CEEBETBL	ANY	ANY

etc etc