

IBM

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Form X24-1350-1
Printed in U.S.A.

Program _____

Programmed by J. Bresenham

INTERNATIONAL BUSINESS MACHINES CORPORATION
IBM 1401 AND 1410 DATA PROCESSING SYSTEMS

Identification _____
76 _____ 80

Date _____

AUTOCODER CODING SHEET

Page No. 10 of _____
1 2

#44A

Line	Label	Operation	OPERAND
3	56	15 16 20 21	25 30 35 40 45 50 55 60 65 70
0.1	KPLDT	DA	1X12, G
0.2			
0.3	KPEN		1, 1
0.4	KXSEN		2, 2
0.5	KX		3, 6
0.6	KSYM		7, 7
0.7	KYSGN		8, 8
0.8	KY		9, 12
0.9			
1.0		ZA	+1, 9, KFACT
1.1			
1.2			
1.3			
1.4			
1.5			
1.6			
1.7			
1.8			
1.9			
2.0			
2.1			
2.2			
2.3			
2.4			
2.5			

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IBM 1401 AND 1410 DATA PROCESSING SYSTEMS

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AUTOCODER CODING SHEET

Line	Label	Operation	OPERAND																
			3	5	6	15	16	20	21	25	30	35	40	45	50	55	60	65	70
0.1																			
0.2	CTYPE	EQU																	
0.3	CAXIS	C																	
0.4	CFLAG																		
0.5	CMARK																		
0.6	CINPUT																		
0.7	CFILE																		
0.8	CHEAD																		
0.9	CDATA																		
1.0	CSKIP																		
1.1	CXFORM																		
1.2	CXLDC																		
1.3	CXSCL																		
1.4	CXSIGN																		
1.5	CXEXP																		
1.6	CXOFF																		
1.7	CYFORM																		
1.8	CYLDC																		
1.9	CYSCL																		
2.0	CYSIGN																		
2.1	CYEXP																		
2.2	CYOFF	EQU																	
2.3	CYOFFS	EQU																	
2.4	CXOFFS	EQU																	
2.5																			

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Program

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Date

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INTERNATIONAL BUSINESS MACHINES CORPORATION

IBM 1401 AND 1410 DATA PROCESSING SYSTEMS

AUTOCODER CODING SHEET

@ no 4-8 # no 12-18 # 5-8
no 0-2-8 v no 7-8 #44B

Form X24-1350-1
Printed in U.S.A.

Identification
76 80
Page No. 24 of
1 2

Line	Label	Operation	OPERAND																
			3	5	6	15	16	20	21	25	30	35	40	45	50	55	60	65	70
0.1	KCTL	DA	1																
0.2																			
0.3	KTYPE		1																
0.4	KAXIS		2																
0.5	KFLAG		3																
0.6	KMARK		4																
0.7	KINPUT		5																
0.8	KFILE		9	10							2								
0.9	KHEAD		11	12							2								
1.0	KDATA		13	15							3								
0.8	KSKIP		6	6							1								
0.9	KXFØRM		7	7	14						1								
1.4	KXLØC		16	18							3								
1.5	KXSCL		19	20							2								
1.6	KEXP		21	22							2								
1.7	KXØFF		23	26							4								
1.0	KYFØRM		8	8	6						1								
1.8	KYLØC		27	29							3								
1.9	KYSCL		30	31							2								
2.0	KYEXP		32	33							2								
2.1	KYØFF		34	37							4								
2.2																			
2.3																			
2.4																			
2.5	KZERØ	DC.W	@	+3	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0

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AUTOCODER CODING SHEET

Line	Label	Operation	OPERAND
3 56		15 16 20 21 25 30 35 40 45 50 55 60 65 70	
0.1			
0.2	KREAD	BLC	KLAST Q. LAST CARD
0.3		R	
0.4		C	Q. KSTOP Q. STOP PLOT
0.5		BU	KNOSTP
0.6		MCW	KI407, KSTOP-8, W
0.7		H	KREAD
0.8	KNOSTP	C	Q. KTAPE Q. ASSIGN PLOT TAPE NUMBER
0.9		BU	KNOTPE
1.0		MN	11, RRT+3
1.1		MN	11, RBSP+3
1.2	KNOTPE	B	KREAD
1.3	KNOTPE	MCW	KI407, 61, W TYPE ID COL 61-80
1.4	*	***	FORCE ZEROS AND STANDARD SIGNS AND TRANSFER CTL INFO
1.5		MCM	KZERO-29, KEILE-1
1.6		MCW	CYFORM, KYFORM
1.7		MCW	CXFORM, H#H#
1.8		MCW	CSKIP, 11, 11
1.9		MCW	CINPUT
2.0		MCW	CMARK
2.1		MCW	CFLAG
2.2		MCW	CAXIS
2.3		MCW	CTYPE
114		MN	11, KFCTL+3
115		ZA	*-6, KFCT#2
	KSTOP	DCW	@STOP PLOT@
		DCW	@#@
	KTAPE	DCW	@PLOT TAPE@
	KI407	EQU	@TO
		DCW	@#@



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AUTOCODER CODING SHEET

1 2

Line	Label	Operation	OPERAND
3 5 6	15	16 20 21 25 30 35 40 45 50 55 60 65 70	
0.1		MZ	CYOFFS, CYOFF
0.2		A	CYOFF, KYOFF
0.3		MZ	CYSIGN, CYEXP
0.4		A	CYEXP, KYEXP
0.5		A	CYSCL, KYSCL
0.6		A	CYLDC, KYLDC
0.7		MZ	@ @, KKYLDC
0.8			
0.9		MZ	CXOFFS, CXOFF
1.0		A	CXOFF, KXOFF
1.1		MZ	CXSIGN, CXEXP
1.2		A	CXEXP, KXEXP
1.3		A	CXSCL, KXSCL
1.4		A	CXLDC, KYLDC
1.5		MZ	@ @, KXLDC
1.6			
1.7		A	CDATA, KDATA
1.8		MZ	@ @, KDATA
1.9		A	CHEAD, KHEAD
2.0		MZ	@ @, KHEAD
2.1		A	CFILE, KFILE
2.2		MZ	KREAD, KFILE
2.3			
2.4			
2.5			
045		MZ	KREAD, CYSCL
125		MZ	KREAD, CXSCL
0112		MNI	11. KECTG+3

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AUTOCODER CODING SHEET

Identification _____
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1 2

Line	Label	Operation	OPERAND
3 56	15 16	20 21	25 30 35 40 45 50 55 60 65 70
0.1	KHIST	ZA	*-6, KYKY Y = 0 IF Y OFFSET NEGATIVE
0.2		BM	KGØRED, KYØFF
0.3		MCW	KYØFF, KY Y = Y OFFSET IF POSITIVE
0.4		B	KGØRED
0.5			
0.6	KPLUS	BCE	KPSKU, RBUF+1, t
0.7		B	KCALLX
0.8	KPSKU	MN	KPENUP, KPEN
0.9		B	KCALLX
1.0			
1.1	KXNEG	C	JANS, -0000
1.2		BU	KNØTZR
1.3		ZA	*-6, JANS
1.4		ZA	*-6, KXMIN
1.5		B	KSTØRX
1.6	KNØTZR	MN	KPENUP, KPEN
1.7		B	KGØRED
1.8			
1.9	KNXMAX	MCW	JANS, KXMAX
2.0		B	KSTØRX
2.1	KNXMIN	MCW	JANS, KXMIN
2.2		B	KSTØRX
2.3			
2.4			
2.5			

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Line	Label	Operation	OPERAND													
			3	5	6	15	16	20	21	25	30	35	40	45	50	55
0.1	KHISTS	B	INHIBT													
0.2		MCW	KPENDW, KPEN													
0.3		B	KQSY													
0.4																
0.5	KYNEG	C	JANS, -0000													
0.6		BU	KNOTZ													
0.7		ZA	*-6, JANS													
0.8		ZA	*-6, KYMIN													
0.9		B	KSTORY													
1.0	KYMAX	MCW	JANS, KYMAX													
1.1	KNYMAX	MCW	JANS, KYMAX													
1.2		B	KSTORY													
1.3	KNYMIN	MCW	JANS, KYMIN													
1.4		B	KSTORY													
1.5																
1.6																
1.7																
1.8																
1.9																
2.0																
2.1																
2.2																
2.3																
2.4																
2.5																

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Line	Label	Operation	OPERAND															
			3	56	15	16	20	21	25	30	35	40	45	50	55	60	65	70
0.1	KEOFF	MCW	@	@														
0.2		BCE	DRAWX															
0.3		BCE	DRAWX															
0.4		BCE	DRAWY															
0.5		BCE	DRAWY															
0.6		B	KREAD															
0.7	DRAWX	SBR	DRAWXX+3															
0.8	DRAWY	MCW	KPENUP															
0.9		MCW	KXMIN															
1.0		ZA	*-6															
1.1		BM	*+8															
1.2		MCW	KYOFF															
1.3		B	INHIBT															
1.4		MCW	KPENDW															
1.5		MCW	KXMAX															
1.6		B	INHIBT															
1.7	DRAWXX	B	0															
1.8																		
1.9	DRAWY	SBR	DRAWYX+3															
2.0		MCW	KPENUP															
2.1		MCW	KYMIN															
2.2		ZA	*-6															
2.3		BM	*+8															
2.4		MCW	KXOFF															
2.5		B	INHIBT															
2.6		MCW	KPENDW															
2.7		MCW	KYMAX															
2.8		B	INHIBT															
2.9	DRAWYX	B	0															



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Line	Label	Operation	OPERAND												
			3	56	15	16	20	21	25	30	35	40	45	50	55
0.1	INHIBT	SBR	INHIBX+3												
0.2		C	IX3,+FILLAD												
0.3		BL	KKK G IF LESS THEN ϕ .K.												
0.4		SBR	IX3, ϕ OTHERWISE RESYNC SINCE FULL												
0.5		NOP	0,0												
0.6		E	KT												
0.7	KKK G	MCM	KPL ϕ T, PLB4F+X3												
0.8		SBR	IX3,12+X3												
0.9	INHIBX	B	0												
1.0															
1.1															
1.2															
1.3															
1.4															
1.5															
1.6															
1.7															
1.8															
1.9															
2.0															
2.1															
2.2															
2.3															
2.4															
2.5															
025	FILLAD	EQU	1200												