

MCM TAPE TAPE-24.TXT

TAPE LABEL/ANNOTATIONS: "GR  
MCM  
LIB/70  
1100"

DATE CREATED: June 4, 1975

GROUPS:

0	1	60	100	101	105	106	110	112	114	116
118	119	120	121	123	126	127	129	141	145	150

NAMES IN GROUP 0:

ΔPA	ΔQA	SAL	N	WUD	NAM	PCT	PED	PCL	PJT	PCS	HSL
DAT	RD	ETR	EPN	ΔCP	WEA						

ΔPA [7 by 3 array of type char; element size 1 byte(s)]  
MCM  
LIB/70  
LISTER

ΔQA [4 by 3 numeric array; element size 3 byte(s)]  
750604 1100 750604 0  
100 100 750604 0  
101 100 750528 0

SAL [numeric vector of length 20; element size 8 byte(s)]  
14014E0000000000 03304366770A3D70 A3D84368B147AE14 7AE04329711EB851  
EB804358CD999999 99984339BFD70A3D 70A0435A770A3D70 A3D8437C5F5C28F5  
C2904354C4CCCCC CCD04335DB333333 3330434351EB851E B850432EB2147AE1  
47B043278051EB85 1EB84320F28F5C28 F5C34E0000000000 05914E0000000000  
0000431554000000 0000431C2AB851EB 851F4E0000000000 00004E0000000000

∇N;I;X

```
[1] I←1
[2] PJN[I;]←X→(' 'Λ.=X←8ρ7[X])/0
[3] PJT[I;]←26ρ1[X]
[4] →(43≥I←I+1)/2
```

∇

∇WUD;N;T;T1;TH

```
[1] WEA←(16[X]'WEEK OF: MONTH ',(4↑WEA),' DAY ',¯2↑WEA)[16 17 18 19 20 25 26]
[2] WEN←((4 9ρRD)Λ.=WEA,' ')/14
[3] [XS N←100+±T→('X'Λ.=T←¯2↑15[X]'EMPLOYEE NO.: XX')/0◦[XS 0
[4] →('YES'Λ.≠¯3↑(2+ρSNA)[SNA,' YES')/3
[5] [XS N◦N [XC'JN H'◦JN←0 8ρH←0 4ρ0◦[XS 0→(0≠[NC'H')/6◦T1←0
[6] →('X'=1↑T←8↑TH←19↓20[X]'JOB NUMBER, HOURS: ',JN[(''ppJN)[T1+1;],' ')/3
```

[7] JN[T1;]←T°H←(((T1-1)ρ1),0)∖H°JN←((T1←1+(ρJN  
 [1]),8)ρJN°→(0≠T1←(JNΛ.=T)/ι1↑ρJN)/8  
 [8] →6°H[T1;WEN,5]←H[T1;WEN,5]+[60×+/\_8↓TH  
 ▽

NAM [13 by 20 array of type char; element size 1 byte(s)]  
 CASHIN  
 WOLFE  
 RAMER  
 WALLACE  
 LARAYA  
 COPELAND  
 ARPIN  
 EDWARDS  
 SEEDS  
 SWANSON  
 MOFFATT  
 FARNELL  
 QUINTANA  
 RAMOS  
 RIVINGTON  
 JONES  
 BROWN  
 MABEE  
 PRESTIGIACOMO  
 BERG

▽PCT

[1] LC←LC+4°□←' '°→(THΛ.=0)/4  
 [2] □←' '°□←' TOTAL HOURS: ',9 2 0°TH  
 [3] □←' TOTAL DOLLARS: ',9 2 0°TD  
 [4] □←((51-LC),1)ρ' '°→(LC≥51)/5  
 [5] □←' '°□←' PROJECT COST SUMMARY'  
 [6] □←' '°□←'PROJECT NUMBER: ',PN,' REPORT DATE: ',DATE  
 [7] □←' '°□←' FOR THE WEEKS OF: ',RD,' TOTAL'  
 [8] LC←6°TD←TH←5ρ0  
 ▽

▽PED;X;Y;I;T;TTH

[1] □←' '°□←' EMPLOYEE TIME REPORT PAGE: ',3 0 0°PG←PG+1  
 [2] □←' '°□←'EMPLOYEE: ',(4 0 0°EN),(15ρ' ',SNA,' '), ' REPORT DATE: ',DATE  
 [3] □←' '°□←'PROJECT ',RD,' TOTAL'  
 [4] LC←5+I←1°X←'GDP' ιJN[;1]°TTH←4 5ρ0  
 [5] L1:LC←LC+1+1[+/Y°□←((Y≠JN),(((+/Y),2)ρ' ')),9 2 0°T←((Y←I=X)≠H)÷60  
 [6] □←' ',45ρ' '-'  
 [7] L2:LC←LC+2°□←' '°□←'TOTAL: ',9 2 0°TTH[I;]←+≠T  
 [8] →(4>I←I+1)/L1  
 [9] →(4=I)/L2°T←TTH  
 [10] □←((51-LC),1)ρ' '°TTD←TTD+TTH  
 [11] →(IG<ρG)/0  
 [12] □←' '°□←' AREA TOTALS PAGE: ',3 0 0 °PG+1  
 [13] I←1°□←' '°□←' REPORT DATE: ',DATE  
 [14] L3:□←' '°□←'(4 11ρGENERAL DEVELOPMENTPRODUCTION TOTAL ') [I;]

```

[15]  ◻←''◦◻←' FOR THE WEEKS OF:  ',RD,' TOTAL'
[16]  ◻←''◦◻←' TOTAL HOURS:  ',9 2 0◻TTH[I;]
[17]  →(4≥I←I+1)/L3

```

∇

∇PCL;WT;M

```

[1]  WT[;8]←' '◦→('G'=1↑PN)/2◦WT←JN
[2]  →(0=+/M←WTΛ.=PN)/0
[3]  TH←TH+WT←|(.005+,M≠H)÷60
[4]  LC←LC+2◦◻←''◦◻←(4◻EN),' ',(13pSNA,' '),9 2 0◻WT T
[5]  TD←TD+WT×HSA

```

∇

PJT [26 by 44 array of type char; element size 1 byte(s)]

SECRETARIAL  
ADMINISTRATION  
PURCHASING  
SICK  
HOLIDAY  
PERSONAL  
SALES  
TRAINING  
TRAVEL  
MCM/70 CPU  
MAIN MEMORY  
MEMORY  
I/O  
TAPE CASSETTES  
KEYBORAD  
BATTERIES  
CARD STACK  
POWER SUPPLY  
DISPLAY  
CABLES  
OVERALL ASSEMBLY  
GPI-1  
GPI-2  
GPI CABLES  
77 CPU  
70 MAINTENANCE  
COMMUNICATIONS SUBSYSTEM  
FLOPPY DISK/70  
POWER SUPPLY MARK 2  
MCM/77 SYSTEM DESIGN  
MCM/170 SYSTEM DESIGN  
DEVELOPMENT MAINTENANCE  
GPI-3 (CARD READER)  
MCM/70 CASE DEVELOPMENT  
GPI-2 (HYTYPE)  
GPI-1  
POWER SUPPLY TESTER  
I/O TESTER  
ROM/RAM TESTER  
DISPLAY/KEYBOARD TESTER  
MAIN MEMORY COMPARITOR

MFE DECK TESTER  
GPI TESTER  
END USER SYSTEMS

∇PCS;G;I;X;LC

```
[1] I←0°G←100+EPN°PD←43 5p0°PH←43 5p0
[2] L1:[]XS G[I←I+1]
[3] X←PNN\ENN
[4] PH[X;]←PH[X;]+H
[5] PD[X;]←PD[X;]+[HSL×H÷.6
[6] →(I<ρG)/L1
[7] °[]OU 1 16°I←1+PG←LC←0°[]←'READY PRINTER'°[]OU 0
[8] L2:→(0≠LC)/L3
[9] []←''°[]←' PROJECT SUMMARY PAGE: ',PG←PG+1
[10] []←''°[]←' REPORT DATE: ',DATE
[11] LC←7°[]←2 1ρ' '°[]←'PROJECT NUMBER/TITLE ',RD,' TOTAL'
[12] L3:[]←''°[]←PJN[I;],' TOTAL HOURS: ',9 2 0⊕PH[I;]÷60
[13] []←2 1ρ' '°[]←PJT[I;],' TOTAL DOLLARS: ',9 2 0⊕PD[I;]×.01
[14] LC←0°[]←(51-LC)ρ' '°→(45>LC)/L4
[15] L4:→(43≥I←I+1)/L2
[16] []←(51-LC)ρ' '°I←1
[17] []←''°[]←' PROJECT SUMMARY TOTALS PAGE: 'PG+1
[18] []←''°[]←' REPORT DATE: ',DATE
[19] L5:X←'GDP '[I]=PJN[;1]°→(I=4)/L6°X←(1ρpPD)ρ1
[20] []←''°[]←(4 11ρ'GENERAL DEVELOPMENTPRODUCTION TOTAL '[I;],9 2 0⊕(+/X≠PH)÷60
[21] []←2 1ρ' '°[]←' TOTAL DOLLARS: ',9 2 0⊕(+/X≠PD)×.01
[22] →(4≤I←I+1)/L5
```

∇

HSL [numeric vector of length 20; element size 8 byte(s)]  
140141505838B6BE 9F1D41A16BFA1399 086B41A4EE52FDC3 50EF41414971C637  
0327418BE629E7BD 3423415AFA3BED79 35C2418E846533E4 A6BF41C3EF3CE784  
BDEF41858B1B4110 39FE4154D8248C86 3902416A0E0D6C1A 57234149904612B7  
2F8E413E3ACB193C D7624133E7AD125E 75C7418C4EC4EC4E C4EC4E0000000000  
0000412199999999 999A412C5FA84857 77224E0000000000 00004E0000000000

DAT [vector of type char of length 9; element size 1 byte(s)]  
MAY 30/75

RD [vector of type char of length 36; element size 1 byte(s)]  
MAY 05 MAY 12 MAY 19 MAY 26

∇ETR;LC;IG;TTD;G;EN;PG

```
[1] TTD←4 5p0°LC←51+PG←IG←0°G←(100<G)/G←[]XN\0°[]OU 1 6
[2] []XS 100+EN←100+G[IG←IG+1]
[3] PED
[4] →(IG<ρG)/2
```

∇

EPN [numeric vector of length 20; element size 1 byte(s)]  
12 14 3 5 6 10 16 18 19 20 21 23 26 27 29 41 45 50 0 0

```

∇ΔCP;ΔG;ΔGC;ΔGN;ΔT
[1] ΔG←□XNι0□PT←10
[2] 'GROUP';ΔGC□XS ΔGC◦ΔGN←□XN ΔGC←1↑ΔG
[3] ΔGC □XC[2](0=□NC ΔT)≠ΔT←1 4↑ΔGN
[4] ΔGC □XW[2](0≠□NC ΔT)≠ΔT
[5] →(0≠ρΔGN←1 0↓ΔGN)/3 6
[6] →(0<ρΔG←1↓ΔG)/2
[7] □XS 0◦□XF[2]ι0
[8] 'COPY DONE'◦□PT←0

```

∇

WEA [vector of type char of length 7; element size 1 byte(s)]  
MAY 19

NAMES IN GROUP 1:

ΔGΔ ΔSΔ ΔDΔ ΔCΔ ΔFΔ ΔNΔ ΔOΔ ΔUΔ ΔIΔ ΔTΔ ΔYΔ ΔAΔ  
ΔXΔ ΔWΔ ΔJΔ ΔΔΔ Δ\_Δ

∇ΔGΔ Δ0Δ;Δ1Δ

```

[1] →0◦□'NO! FN ACTIVE'◦→2[ι1=ρ□LC
[2] 1 □XC □FN◦1 □XC □VA◦□XS 0
[3] 1 □XD Δ1Δ◦1 □XC Δ1Δ←□XN 0
[4] 1 □XD Δ1Δ←□XN 1◦1 □XD'Δ0Δ Δ9Δ'
[5] →0×ι0=ρΔ0Δ←,Δ0Δ◦□EX Δ1Δ
[6] →0◦□XS Δ0Δ◦→Δ9Δ[ι1≠ρΔ0Δ←ΔFΔ Δ0Δ
[7] Δ9Δ:→0◦□'NOT FOUND'

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∇

∇ΔSΔ Δ1Δ;Δ0Δ;Δ2Δ

```

[1] →0◦□'NO! FN ACTIVE'◦→2[ι(1=ρ□LC)v0=□XV
[2] →Δ9Δ[ι0=0\0ρΔ1Δ←,Δ1Δ
[3] →Δ5Δ[ι1=1↑ρΔ0Δ←ΔYΔ Δ1Δ,(0=ρΔ1Δ)/□XV
[4] →Δ8Δ[ι0≠1↑ρΔ0Δ
[5] Δ0Δ←4++/Δ2Δ←Δ2Δ=(ιρΔ2Δ←2↓Δ_Δ[;□IO])+4-□IO
[6] Δ2Δ←1 1,(Δ2Δ,0)v0,~Δ2Δ◦→Δ7Δ[ι99<Δ0Δ
[7] Δ2Δ←Δ2Δι0◦ΔΔΔ←Δ2Δ\ΔΔΔ◦Δ_Δ←Δ2Δ\Δ_Δ
[8] Δ0Δ←Δ0Δ,0,Δ_Δ[□IO;□IO],11,Δ2Δ
[9] Δ_Δ[Δ2Δ;]←4↑Δ0Δ◦ΔΔΔ[Δ2Δ;]←7↑Δ1Δ,7ρ' '
[10] Δ5Δ:→Δ8Δ[ι□XVΛ.≠0,1↑Δ0Δ←,Δ0Δ
[11] →Δ6Δ[ι~2|1↑3↓Δ0Δ◦→Δ8Δ[ι(1↑Δ0Δ)∈0 1 2 3 100 101
[12] →0×ι7≠8|Δ_Δ[ι1↑Δ0Δ;3+□IO]◦ΔJΔ Δ0Δ
[13] →0◦□'UPDATE RECOMENDED'
[14] Δ8Δ:→0◦□'NOT SAVED-THIS IS ',,1 0↓ΔΔΔ[1,1↑,ΔYΔ □XV;]
[15] Δ9Δ:→0◦□'ILLEGAL NAME'
[16] Δ7Δ:→0◦□'NOT SAVED-DIRECTORY FULL'
[17] Δ6Δ:→0◦□'NO! WS NOT ON WORKING TAPE' N

```

∇

∇ΔDΔ Δ0Δ;Δ1Δ

```

[1] →0◦□'NO! FN ACTIVE'◦→2[ι1=ρ□LC
[2] →Δ9Δ[ι0=0\0ρΔ0Δ

```

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[3] →0×ι1≠1↑ρΔ0Δ←ΔYΔ Δ0Δ
[4] →Δ9Δ[ι(1↑Δ0Δ←,Δ0Δ)∈0 100
[5] →0×ι'Y'≠1↑□I0□'Y=>DROP ',,ΔΔΔ[↑1↑Δ0Δ;]
[6] Δ1Δ[↑1↑Δ0Δ]←0◦Δ1Δ←(1↑ρΔ_Δ)ρ1
[7] ΔΔΔ←Δ1Δ←ΔΔΔ◦Δ_Δ←Δ1Δ←Δ_Δ
[8] ◦_Δ(□XV=Δ0Δ←1↑Δ0Δ)/'□XS 0'
[9] →0◦□EX ΔNΔ 2 3◦Δ0Δ □XD □XN Δ0Δ
[10] Δ9Δ:→0◦□'INVALID NAME'

```

▽

▽Δ0Δ ΔCΔ Δ1Δ 1

```

[1] →0×ι1≠ρΔ0Δ←ΔFΔ Δ0Δ
[2] Δ1Δ←□XN Δ0Δ◦→Δ9Δ[ι0≠ρΔ1Δ
[3] Δ9Δ:Δ0Δ □XR Δ1Δ 0

```

▽

▽Δ4Δ←ΔFΔ Δ0Δ;Δ1Δ;Δ2Δ;Δ3Δ;ΔPΔ;ΔQΔ

```

[1] →0×ι0=1↑ρΔ0Δ←ΔYΔ Δ0Δ◦Δ4Δ←ι0
[2] Δ4Δ←(Δ1Δ←2|Δ0Δ[;3+□I0])/Δ0Δ[;□I0]
[3] →0×ι0=1↑ρΔ0Δ←(∼Δ1Δ)≠Δ0Δ
[4] →Δ9Δ[ιV/(Δ1Δ←8|Δ0Δ[;3+□I0])∈2 6 ∈1
[5] Δ7Δ:→0×ι0=Δ1Δ←|ΔTΔ-Δ0Δ[□I0;1+□I0]
[6] Δ1Δ←Δ1Δ=Δ0Δ[;1+□I0]
[7] Δ4Δ←Δ4Δ,Δ2Δ←Δ1Δ/Δ0Δ[;□I0]
[8] Δ8Δ:Δ3Δ←□XN[1+□I0]1↑Δ2Δ
[9] (1↑Δ2Δ)□XR[1+□I0]Δ3Δ←(ΔXΔ Δ3Δ)≠Δ3Δ
[10] →Δ8Δ[ι0≠ρΔ2Δ←1↓Δ2Δ◦□EX Δ3Δ◦(1↑Δ2Δ)□XW Δ3Δ
[11] Δ2Δ←Δ1Δ/Δ0Δ[;4+□I0]◦□XF[1+□I0]ι0
[12] Δ_Δ[Δ2Δ;3+□I0]←Δ_Δ[Δ2Δ;3+□I0]+1
[13] →Δ7Δ◦→0×ι0=1↑ρΔ0Δ←(∼Δ1Δ)≠Δ0Δ
[14] Δ9Δ:2 12ρ'LIB/70 ERRORGROUP ERROR '◦□PT←0
[15] 5 0 0⊘(Δ1Δ∈2 6)≠Δ0Δ[;,□I0],Δ1Δ◦.÷,2

```

▽

▽Δ1Δ←ΔNΔ Δ2Δ

```

[1] 1 □XC □FN◦→2[ι~3∈Δ2Δ◦1 □XC □XN 0
[2] 1 □XC Δ2Δ←(ΔXΔ Δ2Δ)≠Δ2Δ←□VA◦→3[ι~2∈Δ2Δ
[3] 1 □XD Δ1Δ←□XN 1◦1 □XD □XN 0

```

▽

▽Δ0Δ;A

```

[1] □OFF
[2] ◦32□'MCM/APL - LIB/70 -',ΔΔΔ[□I0;]
[3] A←(8ρ1 1 0)\6 0 0⊘,1 1↑Δ_Δ
[4] A←1001_6↓(□I0+13)□'DATE: ',A
[5] Δ_Δ[□I0;□I0]←|1E6|A

```

▽

▽ΔUΔ;Δ0Δ;Δ1Δ;Δ2Δ;Δ3Δ;Δ4Δ;ΔPΔ;ΔQΔ

```

[1] →0◦□'NO! FN ACTIVE'◦→2[ι1=1↑ρ□SI
[2] →0◦□'NO! GROUP ACTIVE'◦→3[ι0=□XV◦Δ3Δ←0

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[3] Δ6Δ:Δ0Δ←0 0,1=8|2Δ Δ[;3+□I0]
[4] Δ Δ[;3+□I0]←Δ Δ[;3+□I0]-Δ0Δ
[5] →Δ9Δ[ι0=ρΔ0Δ←Δ0Δ/Δ Δ[;□I0]
[6] →□LC[ι0≠ρΔ0Δ←1Δ0Δ◦(1↑Δ0Δ)□XD □XN 1↑Δ0Δ
[7] Δ9Δ:Δ2Δ←0 0,2Δ Δ[;1+□I0]◦Δ1Δ←Δ Δ[;3+□I0]
[8] Δ3Δ←|/(Δ0ΔΛΔ2Δ>1E3|Δ3Δ)/Δ2Δ◦Δ0Δ←0≠8|Δ1Δ
[9] →Δ5Δ[ι~ν/Δ2Δ←Δ2Δ=Δ3Δ
[10] Δ1Δ←Δ2ΔΛ5=8|Δ1Δ◦Δ0Δ←Δ2ΔΛ3=4|Δ1Δ
[11] Δ7Δ:→Δ8Δ[ι0≠ΔTΔ Δ3Δ
[12] →Δ9Δ◦→Δ5Δ[ι'Y'≠1↑□I0□'Y=>NEXT TAPE'
[13] Δ8Δ:ΔWΔ Δ0Δ/Δ Δ[;□I0]
[14] →2+□LC[ι1E3<Δ3Δ◦Δ4Δ←Δ0Δ/ιρΔ0Δ←Δ0ΔνΔ1Δ
[15] Δ Δ[Δ4Δ;3+□I0]←(8×8≤Δ Δ[Δ4Δ;3+□I0])+Δ0Δ/5-Δ1Δ
[16] ◦Δ(1E3<Δ3Δ)'Δ Δ[Δ4Δ;3+□I0]←Δ Δ[Δ4Δ;3+□I0]-4'
[17] ΔPΔ←(1,1Δ2Δ)≠ΔΔΔ◦ΔQΔ←(1,1Δ2Δ)≠Δ Δ
[18] 0 □XW[1+□I0]'ΔPΔ ΔQΔ'◦ΔQΔ[□I0;1+□I0]←Δ3Δ
[19] ◦Δ(1E3>Δ3Δ)'ΔFΔ Δ1Δ/Δ Δ[;□I0]'
[20] Δ4Δ←(Δ4Δ=4[199|Δ4Δ)/Δ4Δ←□XN[□I0+1]ι0
[21] →3+□LC[ι0=ρΔ4Δ←(~Δ4Δ∈ΔQΔ[;□I0])/Δ4Δ
[22] (1↑Δ4Δ)□XD[1+□I0]□XN[1+□I0]1↑Δ4Δ
[23] →~1+□LC[ι0≠ρΔ4Δ←1Δ4Δ
[24] □XF[1+□I0]ι0
[25] →Δ6Δ◦→Δ7Δ[ι1E3<Δ3Δ←|2E3|1E3+Δ3Δ
[26] Δ5Δ:→3+□LC[ι~ν/Δ1Δ←(8|2Δ Δ[;3+□I0])∈2 4 6
[27] 'LIB/70 ERROR'◦□PT←0
[28] 7 0 0⊕(1 1,Δ1Δ)≠Δ Δ
[29] →0×ι~ν/Δ1Δ←0=2Δ Δ[;1+□I0]
[30] ◦□'GROUPS ONLY ON TAPE 0:'
[31] ◦□0 0 0⊕Δ1Δ/2Δ Δ[;□I0]

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▽

▽ΔIΔ Δ0Δ;Δ1Δ

```

[1] →Δ9Δ[ι0=ρΔ0Δ←,Δ0Δ
[2] Δ1Δ←(ΔYΔ Δ0Δ)[;4+□I0]
[3] →0◦□←ΔΔΔ[Δ1Δ;],(4 5 8 3◦.×1 0 0)⊕Δ Δ[Δ1Δ;]
[4] Δ9Δ:□←'MCM/APL - LIB/70 ',(8p1 1 0)\6 0 0⊕,1 1↑Δ Δ
[5] □←'INDEX TO LIBRARY:' ,ΔΔΔ[□I0;]◦□←''
[6] □←' NAME GROUP TAPE DATE STATUS'◦□←''
[7] □←''◦□←(25p' '), '3210'
[8] □←(1 0ΔΔΔ),((4 5 8◦.×1 0 0)⊕1 ~1Δ Δ), (4 1p2 1 1 1)⊕⊕(4p2)⊕,1 3Δ Δ 1
[9] □←'BIT STATUS'◦□←''
[10] □←' 0 WS PRESENT ON VOL. 0'
[11] □←' 1 LIB VERSION NOT CURRENT'
[12] □←' 2 LIB VERSION ≠ BACK-UP VERSION'
[13] □←' 3 WS NOT LISTED SINCE LAST SAVE'

```

▽

▽R←ΔTΔ X;0

```

[1] R←4 1≥8|~1↑□OU 201◦0←1↑□OUι0
[2] →M[ι0=R←~1 2+.×R◦□OU 0
[3] R←R×ν/(□XN[1+□I0]0)Λ.= 'ΔPΔ '
[4] 0 □XR[1+□I0]'ΔPΔ ΔQΔ'◦→M[ι0=R
[5] 0←2 7ρΔΔΔ[□I0;], ' MCM '
[6] R←R×ν/0Λ.=ΔPΔ[□I0;]

```

```

[7] R←R×ΔQΔ[□I0;1+□I0]
[8] M:→0×i0≠R←R×(RΛ.=X)VRΛ.=|X
[9] →0×i0=x/ρX○□XF[1+□I0]i0
[10] 0←(⌘|X),(X>0)/' WRITE ENABLED'
[11] →1[i'Y'=1↑□I0□'Y=>MOUNT VOL ',0

```

▽

▽R←ΔYΔ X

```

[1] →N[i0=0\0ρX←,X
[2] →E1[i(4=□NC X)v' '=1↑X←(2[7|ρX)↑X,7ρ' '
[3] →E[i0=ρR←R/iρR←ΔΔΔ[;□I0]=1↑X
[4] R←(ΔΔΔ[R;1+iρX]Λ.=X←1↓X)/R
[5] →0°R←Δ_Δ[R;],R°.+ ,0°→E[i1≠ρR
[6] E:→ρR←(0,2|ρR)ρ0
[7] E1:→ρR←0 4ρ0
[8] N:R←1+Ri(X∈R←1↓Δ_Δ[;□I0])/X
[9] R←(1 0↓Δ_Δ[1,R;],R°.+ ,0
[10] R←0 1ρ0°→0×i(ρX)=1↑ρR

```

▽

▽Δ4Δ ΔΔΔ Δ0Δ;Δ1Δ;Δ2Δ;Δ3Δ

```

[1] →0°□'NO! FN ACTIVE'°→2[i1=ρ□LC
[2] →0°□'NO! GROUP ACTIVE'°→3[i0=□XV
[3] →2+□LC[i(ρΔ4Δ←,Δ4Δ)v.=1,ρΔ0Δ←,Δ0Δ
[4] →0°□'LENGTH ERROR'
[5] →Δ6Δ[i~v/Δ1Δ←~Δ0Δ∈□XN[1+□I0]i0
[6] →0°□'GROUPS ',(⌘Δ1Δ/Δ0Δ),' MISSING'
[7] Δ6Δ:→Δ9Δ[i0≠0\0ρΔ0Δ°→0×i0=ρΔ0Δ
[8] Δ2Δ←□I0°□'ENTER WS NAMES'
[9] Δ1Δ←((ρΔ0Δ),7)ρ' '°Δ4Δ←(ρΔ0Δ)ρΔ4Δ
[10] Δ8Δ:Δ1Δ[Δ2Δ;]←7↑(4↓□(3 0 0⌘Δ0Δ[Δ2Δ]),':'),7ρ' ' '
[11] →Δ5Δ[i0=+/ρΔYΔ Δ1Δ[Δ2Δ;]
[12] →Δ8Δ°□'DUPLICATE OR ILLEGAL NAME'
[13] Δ5Δ:→Δ8Δ[i(Δ2Δ←1+Δ2Δ)≤□I0+~1+ρΔ0Δ
[14] Δ7Δ:Δ2Δ←4++/Δ3Δ←Δ3Δ=(iρΔ3Δ←2↓Δ_Δ[;□I0])+4-□I0
[15] Δ3Δ←1 1,(Δ3Δ,0)v0,~Δ3Δ°→Δ5Δ[i99<Δ2Δ
[16] Δ3Δ←Δ3Δi0°ΔΔΔ←Δ3Δ~ΔΔΔ°Δ_Δ←Δ3Δ~Δ_Δ
[17] Δ_Δ[Δ3Δ;]←Δ2Δ,(1↑Δ4Δ),Δ_Δ[□I0;□I0],15°ΔΔΔ[Δ3Δ;]←,1 7↑Δ1Δ
[18] Δ3Δ←(ΔXΔ Δ3Δ)≠Δ3Δ←□XN[1+□I0]1↑Δ0Δ°□XS 0
[19] □XS Δ2Δ°Δ2Δ □XC Δ3Δ
[20] □XS 0°(1↑Δ0Δ)□XR[1+□I0]Δ3Δ
[21] →Δ7Δ[i0≠ρΔ0Δ←1↓Δ0Δ°Δ1Δ←1 0↓Δ1Δ°Δ4Δ←1↓Δ4Δ
[22] →0°□XF[1+□I0]i0
[23] Δ9Δ:→0°□'NOT IMPLEMENTED'
[24] Δ5Δ:→0°□'NOT SAVED-DIRECTORY FULL'

```

▽

▽R←ΔXΔ N

```

[1] →0×iΛ/R←N[;□I0+0 2]v.≠'Δ'
[2] R←Rv~N[;□I0+1]∈'0123456789',~1↓□SI[;□I0+1]

```

▽



∇ΔWA Δ2Δ;Δ1Δ;Δ3Δ;Δ4Δ

- [1] □XS 0◦Δ3Δ←□I0◦→0×ι0=ρΔ2Δ←(0≠Δ2Δ)/Δ2Δ
- [2] Δ9Δ:Δ1Δ←(ΔXΔ Δ1Δ)≠Δ1Δ←□XN Δ2Δ[Δ3Δ]
- [3] Δ4Δ←□I0◦□XS 1◦1 □XC Δ1Δ◦→Δ7Δ[ι0=1↑ρΔ1Δ
- [4] Δ8Δ:Δ2Δ[Δ3Δ]□XR Δ1Δ[Δ4Δ;]
- [5] Δ2Δ[Δ3Δ]□XW[1+□I0]Δ1Δ[Δ4Δ;]
- [6] →Δ8Δ[ι(Δ4Δ←1+Δ4Δ)≤□I0+<sup>-</sup>1+1↑ρΔ1Δ◦□EX Δ1Δ[Δ4Δ;]
- [7] Δ7Δ:1 □XC □XN[1+□I0]Δ2Δ[Δ3Δ]◦□XS 0
- [8] 1 □XD Δ1Δ←□XN 1◦1 □XD Δ1Δ
- [9] Δ2Δ[Δ3Δ]□XD[1+□I0]Δ1Δ
- [10] →Δ9Δ[ι(Δ3Δ←1+Δ3Δ)≤□I0+<sup>-</sup>1+ρΔ2Δ

∇

∇ΔJA Δ0Δ;Δ1Δ;Δ2Δ;ΔPA;ΔQA

- [1] Δ1Δ←(0≠□XV)≠(0=□NC Δ1Δ)≠Δ1Δ←□XN □XV
- [2] 1 □XC □XN □XV◦1 □XC □FN◦1 □XC □VA
- [3] 1 □XD □XN 0◦1 □XC □XN 0◦1 □XD □XN □XV
- [4] Δ2Δ←(ΔXΔ Δ2Δ)≠Δ2Δ◦1 □XD Δ2Δ←□XN 1
- [5] (1↑Δ0Δ)□XD Δ1Δ◦□XS 0◦→Δ9Δ[ι0=1↑(ρΔ1Δ)+ρΔ2Δ
- [6] □XS 1↑Δ0Δ◦(1↑Δ0Δ)□XW Δ2Δ
- [7] Δ9Δ:Δ0Δ[2 3+□I0]←Δ Δ[□I0;□I0], 11+4×4≤8|1↑3↓Δ0Δ
- [8] Δ Δ[<sup>-</sup>1↑Δ0Δ;]←1 4ρΔ0Δ
- [9] ΔWA 1↑Δ0Δ◦→Δ8Δ[ι1 1E3=.>Δ1Δ←ΔTΔι0
- [10] Δ0Δ[1+□I0]←Δ1Δ
- [11] Δ2Δ←1, (1↑Δ0Δ)≠1↓ΔQA[;□I0]
- [12] ΔPA←Δ2Δ≠ΔPA◦ΔQA←Δ2Δ≠ΔQA
- [13] ΔQA←ΔQA<sub>7</sub>1 4ρΔ0Δ◦Δ0Δ[3+□I0]←13
- [14] ΔPA←ΔPA<sub>7</sub>ΔΔΔ[<sup>-</sup>1↑Δ0Δ;]◦ΔPA[□I0;]←ΔΔΔ[□I0;]
- [15] 0 □XW[1+□I0]'ΔPA ΔQA'
- [16] Δ Δ[<sup>-</sup>1↑Δ0Δ;]←1 4ρΔ0Δ
- [17] Δ8Δ:□XS 1↑Δ0Δ◦□XF[1+□I0]ι0

∇

ΔΔΔ [7 by 4 array of type char; element size 1 byte(s)]

MCM  
CLEAR  
LIB/70  
LISTER

Δ Δ [4 by 4 numeric array; element size 3 byte(s)]

750604 0 750604 0  
0 0 750604 1  
100 100 750604 0  
101 100 750528 0

NAMES IN GROUP 60:

GPA ΔP6 ΔWS ΔWE ΔCI ΔCD ΔRE ΔID PAG NPG WID YYI  
SET

GPA [scalar of type char: element size=1 byte(s)]

trouble:

▽ΔP6

```

[1]  @MAIN PGM CONVERSION FROM CARD
[2]  @TO DISKETTE
[3]  @    INITIALIZATION
[4]  ΔEF←0
[5]  GPH←GPA
[6]  ΔV0←0
[7]  ΔNE←0
[8]  ΔIG←100
[9]  NCD←0
[10] ΔSI←0
[11] ΔNC←0
[12] ΔNR←0
[13] ΔNT←0
[14] D T←Δ12Δ13'ENTER DATE: DD MM 76'◦IN 0
[15] ΔR←'◦Z00←ΔRE'
[16] ΔW←'◦ΔWE ''Z00''◦ΔEN←'A'
[17] I←1
[18] ◦OU YA 66
[19] ◦WID 132
[20] ◦PAGE 60 66
[21] @ ASSEMBLE EE RECORDS
[22] ΔBU←ΔCI
[23] ΔID
[24] →(' 1'≠ΔBU[1 2])/0
[25] L1:ΔW[8 9]←ΔR[3 4]←Y 0 37TI←I+1
[26] ΔR
[27] ΔW
[28] NCD←NCD+ΔNC
[29] ΔNE←ΔNE+1
[30] EX ΔR[2 3 4]
[31] →(ΔEF=1)/EF
[32] →(ΔBU[12]=ΔEN)/L2
[33] I←1◦ΔEN←ΔBU[12]
[34] ΔIG←ΔIG+1
[35] ΔIG XW[U2] 'GPA'◦GPA←ΔEN
[36] L2:→(ΔNT≤980)/L1
[37] ΔCD
[38] ΔID
[39] B
[39] ΔIG←100
[40] ΔNT←0
[41] →L1
[42] @END OF RUN REPORT
[43] EF:(ΔIG+1)XW[U2] 'GPA ΔΔΔ'◦ΔΔΔ←GPA←'ΔΔΔ'
[44] ΔCD
[45] GPA←GPH
[46] ΔWS
[47] OFF

```

▽

∇ΔWS

```
[1] NPG
[2] □←(46ρ' '), 'OTIS ELEVATOR COMPANY LTD ', 3⊖D_TE
[3] □←(60ρ' '), 'RUN SUMMARY'
[4] A1←(10ρ' '), 'NUMBER OF EMPLOYEES', 5⊖ΔNE
[5] □←(29ρ' '), 'NUMBER OF DISKS USED ', (3⊖ΔV0), (10ρ' '), 'NUMBER OF CARDS',
(6⊖NCD), A1
∇
```

∇ΔWE EE;A1;A2

```
[1] ΔIG □XW[U2] EE
[2] ΔNT←ΔNT+[(8+ΔNC×72)÷256
[3] A1←(17ρ' '), ((⊖EE)[1;11+ι24]), (17ρ' '), (⊖EE)[1;2+ι9]
[4] A2←(26ρ' '), (3⊖ΔIG), (26ρ' '), 2⊖ΔNC
[5] →(55≥1↓□PC ι0)/L1
[6] NPG
[7] □←(34ρ' '), 'OTIS ELEVATOR COMPANY VOLUME', (10⊖ΔV0), 'DATE', 3⊖D_TE
[8] □←' '
[9] □←(27ρ' '), 'NAME', (30ρ' '), 'SIN', (20ρ' '), 'GROUP', (17ρ' '), 'RECORD' ρ'
[10] L1:□←A1,A2
∇
```

∇R←ΔCI;N;D

```
[1] DΔD←1◦→(0≠□NC'DΔD')/OK
[2] ND:'MOUNT ON UINT 1 INPUT DISK NO. ', ⊖DΔD◦□XF[U1]ι0
[3] DΔD←DΔD+1◦→(DΔD≠D◦0 □XR[U1]'D')/ND
[4] IΔI←13+JΔJ←0
[5] OK:→(13=IΔI)/NB
[6] RB:→0◦IΔI←IΔI+1◦R←BOX[IΔI;]
[7] NB:N←'ABC'[1+1ι5 100TJΔJ], ⊖1ι5 100TJΔJ
[8] →RB◦JΔJ←JΔJ+IΔI←1◦□EX N◦⊖'BOX←', N◦100 □XR[U1]N
∇
```

∇ΔCD

```
[1] □XF[U2]ι0
[2] 'REMOVE DISK ON UNIT 2'
∇
```

∇R←ΔRE ;SIN

```
[1] ΔSI←⊖ΔBU[2+ι9]
[2] ΔNC←1
[3] R←1 72ρΔBU
[4] RE:ΔBU←ΔCI
[5] →(ΔBU[1 2]='/*')/EF
[6] SIN←⊖ΔBU[2+ι9]
[7] ΔNR←ΔNR+1
[8] →(SIN≠ΔSI)/0
[9] R←R, [1]1 72ρΔBU
[10] ΔNC←ΔNC+1
[11] →RE
[12] EF:ΔEF←1
∇
```

∇ΔID ;DATE;VOL

```
[1] ΔV0←ΔV0+1
[2] VOL←'OTIS ELEVATOR CO',∇ΔV0 S
[3] DATE←∇D T
[4] 'MOUNT DISK ON UNIT 2'
[5] L0:→('Y'∈31↓∇'ENTER ''Y'' WHEN NEW DISK LOADED: ')/L1
[6] →L0
[7] L1:→((ρ(∇XN[U2]ι0))=0)/L2
[8] 'NOT A NEW DISK '
[9] ∇XF[U2] ι0
[10] →L0
[11] L2:0 ∇XW[U2] 'DATE ΔV0 VOL '
[12] NPG
[13] ∇←(34ρ' '), 'OTIS ELEVATOR COMPANY VOLUME', (10∇ΔV0), ' DATE', 3∇D TE
[14] ∇←(27ρ' '), 'NAME', (30ρ' '), 'SIN', (20ρ' '), 'GROUP', (17ρ' '), 'RECORDS'
```

∇

∇ZΔ←PAGE MΔ

```
[1] ∇ ZΔ←PAGE MΔ APR 6/76
[2] ∇SET PAGEING TO PRINT 1↑MΔ LINES ON
[3] ∇A PAGE WHICH IS 1↓MΔ LINES LONG
[4] ∇RESULT (ZΔ) IS THE PREVIOUS SETTING
[5] →(≤/MΔ)/L8○→(θ=ρ, MΔ)/L8
[6] 'RANGE ERROR'
[7] →
[8] L8:((φ-∇φMΔ), (ρ, MΔ)↓ZΔ←∇Y0[ι1]6)∇Y0[ι1]6
[9] ZΔ←φ+∇φ2↑ZΔ○∇PC 0 0
```

∇

∇NPG

```
[1] ∇ NPG APR 30/76
[2] ∇FORCE NEW PAGE ON PRINTER. NOTE PAGEING MUST BE ON. CE
[3] ∇←((0[(1↑∇Y0[ι1]6)-1↓∇PCι0], 0)ρ''
```

∇

∇R←WIDTH X;Y

```
[1] ∇ R←WIDTH X
[2] ∇CHANGE PRINT WIDTH TO X (30≤X≤132)
[3] ∇RESULT R IS THE PREVIOUS WIDTH
[4] ∇WIDTH IS UNCHANGED IF X IS EMPTY.
[5] →((30≤X)∧X≤132)/L8○→(θ=ρX)/L8
[6] 'RANGE ERROR'
[7] →
[8] L8:R←1↑Y←∇Y0[ι1]1
[9] (X, (ρ, X)↓Y)∇Y0[ι1]1
```

∇

YYI [68 by 1 array of type char; element size 8 byte(s)]

```
83800000000005000 0000000000000000 0000000000000000 00000000000000102
030405060708090A 0B0C0D0E0F101112 131415161718191A 1B1C1D1E1F202122
232425262728292A 2B2C2D2E2F303132 333435363738393A 3B3C3D3E3F404142
```

434445464748494A 4B4C4D4E4F505152 535455565758595A 5B5C5D5E5F606162  
636465666768696A 6B6C6D0000000000 0000000000000000 0000000000000000  
48249B252E183600 C724F03C10480118 C20E03023C014803 18466A18C70E023C  
8348031846922506 2B2DCDC6442F18C2 3C6D60DB243C762B 3C7568EE24440118  
2727272727272727 270C0F1113182727 5B0B161A120B3508 270D0B1C0E271C0F  
0B0E0F1C270E1C13 200F1C5B6E272727 2727272727272727 2727272727272727  
2727272727272727 2727272727272727 6E00004692250611 2DC3182DC7D03C6E  
2B467218D007F43D 46922506112DA855 473D0E0146AE1824 02680A2506025506  
0455463002452C40 2471680A253C0148 8D25060855463002 452C40C82430488D  
25C13C41481D250E 0246AE18D8354679 25488D25F8151948 36253E6E0E0146AE  
1824026851250602 55C724016872250E 0246AE18D8469225 0611832D06271D19  
686F25BF68662515 3E6E35E61E0044DB 2416007D7D11688D 254524F0687B2524  
7F0B47B8070E0244 03182E20361DC715 EFF0076D247B2483 24DC24F124022513  
25182527252D2537 253A2540254C2555 255E2569256D2577 257F2585A5480A3A

VSET

[1] °'I'□YW'YYI'°□IN □YA 131

▽

NAMES IN GROUP 100:

IWT ILT PJT PJN NAM SAL PCS PCL PCT EPN ETR PED

VIWT;NMS

[1] °□'COPYRIGHT - MCM 1975'  
[2] →0°□'WRONG PROCEDURE'°→3[ι0=ρ,□XV  
[3] (ι0)□XI 0  
[4] 0 □XC NMS←□XN[1+□I0]1  
[5] 1 □XR[1+□I0]NMS°□XS 0  
[6] L1:NMS←6↑(10↓(10+□I0)□'LIB NAME:→ ←'),6ρ' '  
[7] →L1°□'ILLEGAL NAME'°→L2[ιΛ/(2 3ρ'MCM ')v.≠3↑NMS  
[8] L2:ΔΔΔ[□I0;]←' ',NMS  
[9] Δ Δ[□I0;□I0]←|1E6|100L±6↓(6+□I0)□'DATE: YY MM DD'  
[10] □WC°□'DO: □XS 0'

▽

VIILT;Δ0Δ;Δ1Δ;ΔPΔ;ΔQΔ

[1] °□'COPYRIGHT MCM 1975'  
[2] →0°□'WRONG PROCEDURE'°→3[ι2=□NC'ΔΔΔ'  
[3] Δ1Δ←1+|/(Δ1Δ<100)/Δ1Δ←Δ\_Δ[;1+□I0]  
[4] Δ7Δ:°□'MOUNT TAPE'  
[5] °□OU Δ0Δ°→Δ8Δ[ι1<8|\_1↑□OU 201°Δ0Δ←1↑□OUι0  
[6] Δ1Δ←±8↓(12+□I0)□'TAPE NO.',5 0 0°Δ1Δ  
[7] →Δ9Δ[ι(0≠1|Δ1Δ)v99<1E3|Δ1Δ  
[8] →Δ9Δ[ι(9099<Δ1Δ)v1≠x/ρΔ1Δ  
[9] ΔQΔ[□I0;1+□I0]←Δ1Δ°ΔQΔ←1 4↑Δ\_Δ  
[10] ΔPΔ←1 7↑ΔΔΔ  
[11] (ι0)□XI[1+□I0]0°□XF[1+□I0]ι0  
[12] 0 □XW[1+□I0]'ΔPΔ ΔQΔ'  
[13] →0°→Δ7Δ[ι1E3<Δ1Δ←2E3|1E3+Δ1Δ°□XF[1+□I0]ι0

[14] Δ9Δ:→0◊'INVALID TAPE NO.'

[15] Δ8Δ:→0◊'NO TAPE'◊OU Δ0Δ

▽

PJT [26 by 44 array of type char; element size 1 byte(s)]

SECRETARIAL

ADMINISTRATION

PURCHASING

SICK

HOLIDAY

PERSONAL

SALES

TRAINING

TRAVEL

MCM/70 CPU

MAIN MEMORY

MEMORY

I/O

TAPE CASSETTES

KEYBORAD

BATTERIES

CARD STACK

POWER SUPPLY

DISPLAY

CABLES

OVERALL ASSEMBLY

GPI-1

GPI-2

GPI CABLES

77 CPU

70 MAINTENANCE

COMMUNICATIONS SUBSYSTEM

FLOPPY DISK/70

POWER SUPPLY MARK 2

MCM/77 SYSTEM DESIGN

MCM/170 SYSTEM DESIGN

DEVELOPMENT MAINTENANCE

GPI-3 (CARD READER)

MCM/70 CASE DEVELOPMENT

GPI-2 (HYTYPE)

GPI-1

POWER SUPPLY TESTER

I/O TESTER

ROM/RAM TESTER

DISPLAY/KEYBOARD TESTER

MAIN MEMORY COMPARITOR

MFE DECK TESTER

GPI TESTER

END USER SYSTEMS

PJN [8 by 44 array of type char; element size 1 byte(s)]

G0000001

G0000002

G0000003

G0000004

G0000005  
G0000006  
G0000007  
G0000008  
G0000009  
P047500  
P047501  
P047502  
P047503  
P047504  
P047505  
P047506  
P047507  
P047508  
P047509  
P047510  
P047511  
P047512  
P047513  
P047514  
D047501  
D047502  
D047503  
D047504  
D047505  
D047506  
D047507  
D047508  
D047509  
D047510  
D047511  
D047512  
D047513  
D057501  
D057502  
D057503  
D057504  
D057505  
D057506  
D057507

NAM [13 by 20 array of type char; element size 1 byte(s)]  
CASHIN  
WOLFE  
RAMER  
WALLACE  
LARAYA  
COPELAND  
ARPIN  
EDWARDS  
SEEDS  
SWANSON  
MOFFATT  
FARNELL  
QUINTANA

RAMOS  
RIVINGTON  
JONES  
BROWN  
MABEE  
PRESTIGIACOMO  
BERG

SAL [numeric vector of length 20; element size 8 byte(s)]  
14014E0000000000 03304366770A3D70 A3D84368B147AE14 7AE04329711EB851  
EB804358CD999999 99984339BFD70A3D 70A0435A770A3D70 A3D8437C5F5C28F5  
C2904354C4CCCCC CCD04335DB333333 3330434351EB851E B850432EB2147AE1  
47B043278051EB85 1EB84320F28F5C28 F5C34E0000000000 05914E0000000000  
0000431554000000 0000431C2AB851EB 851F4E0000000000 00004E0000000000

∇PCS;I;IG;G;PN;EN;LC;TD;TH

[1] DAT←13↓14□'TODAYS DATE : '◦LC←51  
[2] I←0◦G←(100<G)/G←□XN10◦TH←TD←5ρ0  
[3] PCT◦PN←PJN[I←I+1;]◦IG←0  
[4] □XS 100+EN←<sup>-</sup>100+G[IG←IG+1]  
[5] PCL  
[6] →(IG<ρG)/4  
[7] →(I<1↑ρPJN)/3

∇

∇PCL;WT;M

[1] WT[;8]←' '◦→('G'=1↑PN)/2◦WT←JN  
[2] →(0=+/M←WTL.=PN)/0  
[3] TH←TH+WT←|(.005+,M≠H)÷60  
[4] LC←LC+2◦□←''◦□←(4≠EN), ' ',(13ρSNA, ' '),9 2 0≠WT T  
[5] TD←TD+WT×HSA

∇

∇PCT

[1] LC←LC+4◦□←''◦→(THΛ.=0)/4  
[2] □←''◦□←' TOTAL HOURS: ',9 2 0≠TH  
[3] □←' TOTAL DOLLARS:',9 2 0≠TD  
[4] □←((51-LC),1)ρ' '◦→(LC≥51)/5  
[5] □←''◦□←' PROJECT COST SUMMARY'  
[6] □←''◦□←'PROJECT NUMBER: ',PN,' REPORT DATE: ',DATE  
[7] □←''◦□←' FOR THE WEEKS OF: ',RD,' TOTAL'  
[8] LC←6◦TD←TH←5ρ0

∇

EPN [numeric vector of length 20; element size 1 byte(s)]  
12 14 3 5 6 10 16 18 19 20 21 23 26 27 29 41 45 50 0 0

∇ETR;LC;IG;TTD;G;EN;PG

[1] TTD←4 5ρ0◦LC←51+PG←IG←0◦G←(100<G)/G←□XN10◦□OU 1 6  
[2] □XS 100+EN←<sup>-</sup>100+G[IG←IG+1]



[3] PED  
 [4]  $\rightarrow (IG < \rho G) / 2$   
 ▽

▽PED;X;Y;I;T;TTH S

[1]    ' ' '                                   EMPLOYEE TIME REPORT                   PAGE: ',3 0  
 0PG←PG+1  
 [2]    ' ' ' EMPLOYEE: ',(4 0 0EN), (15ρ' ',SNA, '                   ', '           REPORT DATE:  
 ',DATE  
 [3]    ' ' ' PROJECT   ',RD, '    TOTAL '  
 [4]    LC←5+I←1X←'GDP' JN[;1] TTH←4 5ρ0  
 [5]    L1:LC←LC+1+1[+/Y←((Y≠JN),(((+/Y),2)ρ' ')),9 2 0T←((Y←I=X)≠H)÷60  
 [6]    ' ' '                   ',45ρ' '- '  
 [7]    L2:LC←LC+2' ' ' TOTAL:       ',9 2 0TTH[I;]←+≠T  
 [8]     $\rightarrow (4 > I \leftarrow I + 1) / L1$   
 [9]     $\rightarrow (4 = I) / L2 \circ T \leftarrow TTH$   
 [10]    ' ((51-LC),1)ρ' ' TTD←TTD+TTH  
 [11]     $\rightarrow (IG < \rho G) / \theta$   
 [12]    ' ' '                                   AREA TOTALS                                   PAGE: ',3 0 0 PG+1  
 [13]    I←1' ' '                                   REPORT DATE: ',DATE  
 [14]    L3:' ' ' (4 11ρGENERAL    DEVELOPMENTPRODUCTION TOTAL       ')[I;]  
 [15]    ' ' ' FOR THE WEEKS OF:   ',RD, '    TOTAL '  
 [16]    ' ' '                   TOTAL HOURS:   ',9 2 0TTH[I;]  
 [17]     $\rightarrow (4 \geq I \leftarrow I + 1) / L3$   
 ▽

NAMES IN GROUP 101:

EJΔ RLA MMD PPA HQ ΔLA PRA DIA

▽EJΔCT

[1]    PLΔ[ I0]←0' ((PSΔ[1+ I0] - 1↑PLΔ),1)ρ' '  
 ▽

▽RLA N

[1]     $\rightarrow NT [ \uparrow 0 \neq 1 \uparrow PL\Delta ]$   
 [2]    PT:←TTΔ, ((ρTTΔ) - ρPW) ↑ (ρPWρ' '), ' PAGE ',0 0 01↓PLΔ  
 [3]    PLΔ←PLΔ+2 1' ' '  
 [4]    NT:→(PSΔ[ I0] < N+2, 1↑PLΔ) / 0, NP  
 [5]     $\rightarrow 0 \circ PL\Delta \leftarrow PL\Delta + N, \theta$   
 [6]    NP:→PT ∘ N ← 0 ∘ PLΔ [ I0 ] ← N ∘ EJΔCT  
 ▽

▽R←MMD X

[1]     $\rightarrow TE [ \uparrow 2 = \rho \rho R \leftarrow X ]$   
 [2]    R←((×/ 1↓ρX), 1↑1, ρX)ρX  
 [3]    TE:→0×10≠1↑ρR  
 [4]    R←R,0\0ρX  
 ▽

```

∇N PPA X;I;M;NR;P
[1] I←0◦N←1↑N◦M←1↑N◦P←1↑PSΔ
[2] LP:→0×10=NR←(N-I) | |(P-P|1↑PLΔ)÷M
[3] □←X[I+1NR;]◦RLΔ NR×M
[4] →LP◦I←I+NR 4]

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∇

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∇R←HQ
[1] R←1
[2] LP:→OK[166=1↑1↓□OU R
[3] →0◦□OU 0◦→LP[10≠R←10|R+1
[4] OK:◦□OU R,16

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∇

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∇RA←ΔLA GNA;EA;GA;IA;MA;NA;NMA;PLA;PSA;TTA
[1] GNA←GNA,(0=×/ρGNA)/(8≤2↓Δ_Δ[;3+□IO])/2↓Δ_Δ[;□IO]
[2] →EXΔ[10=ρGNA←ΔFA GNA
[3] →0×10=IA←HQ
[4] →0×1~2|1↑□OU IA,64◦□BO 120
[5] 'POSITION PAPER'◦□PT←200◦PSA←48 51,□PW←80
[6] LGΔ:NA←×/ρNMA←□XN GA←1↑GNA◦PLA←0 1
[7] TTA←6 0 0▯Δ_Δ[MA←''ρφΔYA GA;2+□IO]
[8] TTA←('',(▯GA),') SAVED:',(9ρ0 1 1)\TTA
[9] TTA←'GROUP: ',ΔΔΔ[□IO;],', ',ΔΔΔ[MA;],TTA
[10] IA←□IO◦'CONTENTS:'PRANT(1,NA)ρNMA
[11] LNA:EA←(~GA∈0,□XV)/NA←NMA[IA;]
[12] →DNA[1(□NC EA)∈0 4
[13] →ENΔ◦(NA,':')PRANT '*** CONFLICT ***'
[14] DNA:□EX EA◦DIAASP NA◦GA □XR EA
[15] ENΔ:→LNA[1(□IO+1↑ρNMA)>IA←IA+1
[16] Δ_Δ[MA;3+□IO]←8|Δ_Δ[MA;3+□IO]
[17] →LGA[10<ρGNA←1↓GNA◦EJΔCT
[18] EXΔ:RA←'END OF LIST'
[19] □PT←0◦□OU(1↑□OU10),7×32

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∇P1 PRANT P2;N;R1;R2
[1] R1←[(ρP1←MMA P1)÷1,□PW
[2] R2←[(ρP2←MMA P2)÷1,□PW SP
[3] →SP[1PSΔ[□IO]<N←1+(×/R1)+×/R2
[4] →0◦□←''◦□←P2◦□←P1◦RLΔ N
[5] SP:RLΔ 5◦RLΔ 5
[6] R2 PPA P2◦R1 PPA P1
[7] □←''◦RLΔ 1

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∇

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∇DIAASP XΔ;DΔ;NΔ;TΔ
[1] →ERA[11≠1↑1,1↓ρXΔ
[2] →(NVA,VAA,VAA,FNA,ERA,A2Δ)[□IO+□NC XΔ]
[3] ERA:+'INVALID NAME'
[4] NVA:→0◦(XΔ,':') PRANT '** NO VALUE **'
[5] A2Δ:→0◦(XΔ,':') PRANT '** α2 **'

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[6]  VAD:TΔ←'(',(⌈ρDΔ),((0≠0\0ρDΔ←XΔ)/', '''),')'
[7]  →0°(XΔ,TΔ,':') PRANT DΔ←⌈DΔ
[8]  FND:NΔ←1↑ρDΔ←⌈CR XΔ
[9]  TΔ[;⌈IO]←']'°TΔ←5 0 0⌈(ιNΔ)°.-,⌈IO
[10] TΔ[;⌈IO]←']'°TΔ←(5-(TΔ≠' ')⌈1)ϕTΔ
[11] TΔ[⌈IO;]←' ∇'°DΔ[⌈IO;⌈IO]←' '
[12] °⌈NΔ←'TΔ←(1 0×ρDΔ)ρ''''°DΔ←TΔ,DΔ'
[13] DΔ PRANT ' ∇ '

```

∇

NAMES IN GROUP 105:

JN H SNA HSA EN

JN [8 by 12 array of type char; element size 1 byte(s)]

G0000002  
G0000006  
P047501R  
P047501T  
P047500T  
P047503T  
P047508R  
P047509A  
P047511A  
P047511T  
P047503R  
G0000004

H [5 by 12 numeric array; element size 2 byte(s)]

180 0 0 0 180  
390 0 0 0 390  
30 30 0 0 60  
330 300 0 0 630  
120 0 0 0 120  
120 0 0 0 120  
180 0 0 0 180  
30 0 0 0 30  
1050 660 0 0 1710  
0 420 0 0 420  
0 30 0 0 30  
0 840 0 0 840

SNA [vector of type char of length 7; element size 1 byte(s)]

WALLACE

HSA [numeric vector of length 1; element size 8 byte(s)]

010141414971C637

EN [numeric vector of length 12; element size 4 byte(s)]

0C010098 96820098 968601D1 030601D1 030401D1 02FA01D1 031801D1 034C01D1 035301D1  
036701D1 036801D1 031A0098

NAMES IN GROUP 106:

JN H SNA HSA

JN -- object erased from the tape

H [5 by 15 numeric array; element size 2 byte(s)]

300 0 0 0 300  
720 0 0 0 720  
240 0 360 150 750  
60 0 0 0 60  
600 90 0 0 690  
60 0 0 0 60  
180 0 120 0 300  
240 0 0 0 240  
0 30 30 60 120  
0 240 0 0 240  
0 1050 900 2190 4140  
0 1020 180 0 1200  
0 0 480 0 480  
0 0 330 0 330  
0 0 0 0 0

0xE50xE50xE5 [229 by 229 by 229] numeric array; element size 5 byte(s)]

HSA [numeric vector of length 1; element size 8 byte(s)]

0101418BE629E7BD

NAMES IN GROUP 110:

JN H SNA HSA

JN [8 by 10 array of type char; element size 1 byte(s)]

G0000002  
G0000008  
D047505E  
D057502E  
P047508R  
D047505F  
D047513F  
D047513E  
G0000005  
G0000003

H [5 by 10 numeric array; element size 2 byte(s)]

90 120 0 0 210  
480 0 0 0 480  
240 0 180 0 420  
60 0 0 0 60  
1530 240 0 720 2490  
0 1680 1500 1200 4380

0 330 120 0 450  
0 90 0 0 90  
0 0 480 0 480  
0 0 120 900 1020

SNA [vector of type char of length 8; element size 1 byte(s)]  
COPELAND

HSA [numeric vector of length 1; element size 8 byte(s)]  
0101415AFA3BED79

NAMES IN GROUP 112:  
JN H SNA HSA

JN [8 by 5 array of type char; element size 1 byte(s)]  
G0000002  
G0000009  
G0000006  
G0000005  
G0000008

H [5 by 5 numeric array; element size 2 byte(s)]  
2220 2190 1980 2940 9330  
300 0 300 300 900  
0 60 0 0 60  
0 0 480 0 480  
0 0 0 180 180

SNA [vector of type char of length 6; element size 1 byte(s)]  
CASHIN

HSA [numeric vector of length 1; element size 8 byte(s)]  
010141505838B6BE

NAMES IN GROUP 114:  
JN H SNA HSA

JN [8 by 6 array of type char; element size 1 byte(s)]  
G0000002  
G0000004  
G0000007  
G0000009  
D047503H  
G0000005

H [5 by 6 numeric array; element size 2 byte(s)]  
600 1470 660 0 2730  
240 0 0 0 240

1560 660 1170 0 3390  
0 150 150 0 300  
0 270 0 0 270  
0 0 480 0 480

SNA [vector of type char of length 5; element size 1 byte(s)]  
WOLFE

HSA [numeric vector of length 1; element size 8 byte(s)]  
010141A16BFA1399

NAMES IN GROUP 116:  
JN H SNA HSA

JN [8 by 13 array of type char; element size 1 byte(s)]  
D047508S  
D047502S  
G0000007  
D047502S  
D047502S  
D047501S  
D047503A  
D047502D  
D047504H  
D047504S  
G0000005  
D047508H  
D047503S

H [5 by 13 numeric array; element size 2 byte(s)]  
840 360 0 0 1200  
240 1200 0 0 1440  
480 0 0 0 480  
660 1200 0 0 1860  
180 1200 0 0 1380  
0 60 0 0 60  
0 60 0 0 60  
0 420 0 0 420  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0

SNA [vector of type char of length 5; element size 1 byte(s)]  
ARPIN

HSA [numeric vector of length 1; element size 8 byte(s)]  
0101418E846533E4

NAMES IN GROUP 118:

JN H SNA HSA

JN [8 by 6 array of type char; element size 1 byte(s)]

G0000004  
P047508E  
P047508T  
D047505E  
G0000005  
D047505H

H [5 by 6 numeric array; element size 2 byte(s)]

960 0 0 0 960  
480 0 0 0 480  
480 0 0 0 480  
480 0 0 0 480  
0 0 480 0 480  
0 0 1920 0 1920

SNA [vector of type char of length 7; element size 1 byte(s)]

EDWARDS

HSA [numeric vector of length 1; element size 8 byte(s)]

010141C3EF3CE784

NAMES IN GROUP 119:

JN H SNA HSA

JN [8 by 9 array of type char; element size 1 byte(s)]

D047502S  
D047502D  
D047508E  
D047513R  
D047503S  
D047508S  
G0000005  
D047503E  
D047511E

H [5 by 9 numeric array; element size 2 byte(s)]

1530 960 0 0 2490  
480 0 0 0 480  
240 0 0 0 240  
150 0 0 0 150  
0 1440 1440 1800 4680  
0 0 480 0 480  
0 0 480 0 480  
0 0 0 360 360  
0 0 0 240 240

SNA [vector of type char of length 5; element size 1 byte(s)]  
SEEDS

HSA [numeric vector of length 1; element size 8 byte(s)]  
010141858B1B4110

NAMES IN GROUP 120:  
JN H SNA HSA

JN [8 by 8 array of type char; element size 1 byte(s)]  
G0000008  
P047508R  
P047508T  
D047513F  
D047505F  
D047505E  
G0000002  
G0000005

H [5 by 8 numeric array; element size 2 byte(s)]  
480 0 0 0 480  
1200 0 0 1200 2400  
690 240 0 0 930  
30 0 0 0 30  
0 1110 1620 0 2730  
0 1095 360 1200 2655  
0 45 0 0 45  
0 0 480 0 480

SNA [vector of type char of length 7; element size 1 byte(s)]  
SWANSON

HSA [numeric vector of length 1; element size 8 byte(s)]  
01014154D8248C86

NAMES IN GROUP 121:  
JN H SNA HSA

JN [8 by 23 array of type char; element size 1 byte(s)]  
G0000008  
D057503R  
G0000002  
D057505F  
D057513D  
P047509T  
P047510A  
P047503T  
P047503R  
P047501R



P047511S  
P047504T  
P047501S  
G00000004  
G00000005  
D047508E  
P047508T  
D057504F  
P047511T  
P047511A  
P047513T  
P047502A  
P047501T

H [5 by 23 numeric array; element size 2 byte(s)]

570 150 0 0 720  
60 0 0 0 60  
120 90 120 0 330  
330 0 0 0 330  
30 0 0 0 30  
180 0 0 0 180  
30 0 0 0 30  
480 720 0 0 1200  
12 0 0 0 12  
540 480 0 0 1020  
300 570 300 120 1290  
30 390 0 420 840  
0 60 0 0 60  
0 0 240 0 240  
0 0 480 0 480  
0 0 60 0 60  
0 0 90 0 90  
0 0 90 0 90  
0 0 600 210 810  
0 0 480 0 480  
0 0 0 1440 1440  
0 0 0 30 30  
0 0 0 270 270

SNA [vector of type char of length 7; element size 1 byte(s)]  
MOFFATT

HSA [numeric vector of length 1; element size 8 byte(s)]  
0101416A0E0D6C1A

NAMES IN GROUP 123:  
JN H SNA HSA

JN [8 by 5 array of type char; element size 1 byte(s)]  
D047508S  
D047501S  
D047508D

D047509E  
D057507S

H [5 by 5 numeric array; element size 2 byte(s)]  
2730 402 822 1902 5856  
0 2532 1092 162 3786  
0 0 282 0 282  
0 0 0 138 138  
0 0 0 204 204

SNA [vector of type char of length 7; element size 1 byte(s)]  
FARNELL

HSA [numeric vector of length 1; element size 8 byte(s)]  
01014149904612B7

NAMES IN GROUP 126:  
JN H SNA HSA

JN [8 by 5 array of type char; element size 1 byte(s)]  
G00000001  
G00000006  
P047500E  
P047513E  
D047510H

H [5 by 5 numeric array; element size 2 byte(s)]  
120 0 0 0 120  
165 0 0 0 165  
870 0 0 0 870  
360 0 0 0 360  
870 0 0 0 870

SNA [vector of type char of length 5; element size 1 byte(s)]  
HICKS

HSA [numeric scalar: element size=8 byte(s)]  
480275411418

NAMES IN GROUP 127:  
JN H SNA HSA

JN [8 by 9 array of type char; element size 1 byte(s)]  
G00000002  
P047501A  
P047506A  
G00000005  
P047505A

P047511A  
P047504A  
G0000003  
D047513F

H [5 by 9 numeric array; element size 2 byte(s)]  
1437 1680 1470 1320 5907  
570 420 420 210 1620  
60 0 150 210 420  
0 0 480 0 480  
0 0 120 0 120  
0 210 0 720 930  
0 0 0 30 30  
0 0 0 60 60  
0 180 0 0 180

SNA [vector of type char of length 8; element size 1 byte(s)]  
QUINTANA

HSA [numeric vector of length 1; element size 8 byte(s)]  
0101413E3ACB193C

NAMES IN GROUP 129:  
H JN SNA HSA

H [5 by 17 numeric array; element size 2 byte(s)]  
720 600 0 960 2280  
450 0 0 0 450  
300 0 0 0 300  
210 120 0 0 330  
360 0 0 0 360  
210 0 0 0 210  
0 510 0 0 510  
0 240 0 0 240  
0 240 0 0 240  
0 420 0 0 420  
0 0 480 0 480  
0 0 360 0 360  
0 0 30 0 30  
0 0 1140 660 1800  
0 0 240 0 240  
0 0 0 270 270  
0 0 0 480 480

JN [8 by 17 array of type char; element size 1 byte(s)]  
P047508A  
P047506A  
P047502A  
P047508R  
P047510A  
P047510R

P047501A  
P047506R  
P047508H  
P047513A  
G0000005  
P047511A  
D047502H  
P047500E  
P047501R  
P047500T  
G0000004

SNA [vector of type char of length 5; element size 1 byte(s)]  
RAMOS

HSA [numeric vector of length 1; element size 8 byte(s)]  
01014133E7AD125E

NAMES IN GROUP 141:

JN H SNA HSA

JN [8 by 7 array of type char; element size 1 byte(s)]

G0000002  
G0000003  
G0000007  
P047510A  
G0000004  
G0000005  
P047505E

H [5 by 7 numeric array; element size 2 byte(s)]

1590 660 1320 1590 5160  
690 480 540 960 2670  
120 180 210 60 570  
90 0 0 0 90  
0 1200 0 0 1200  
0 0 480 0 480  
0 0 0 45 45

SNA [vector of type char of length 9; element size 1 byte(s)]  
RIVINGTON

HSA [numeric vector of length 1; element size 8 byte(s)]  
0101418C4EC4EC4E

NAMES IN GROUP 145:

JN H SNA HSA

JN [8 by 2 array of type char; element size 1 byte(s)]  
G0000001  
G0000005

H [5 by 2 numeric array; element size 2 byte(s)]  
2040 2310 1845 2070 8265  
0 0 480 0 480

SNA [vector of type char of length 5; element size 1 byte(s)]  
BROWN

HSA [numeric vector of length 1; element size 8 byte(s)]  
0101412199999999

NAMES IN GROUP 150:  
H JN SNA HSA

H [5 by 20 numeric array; element size 2 byte(s)]  
660 0 0 60 720  
270 0 0 0 270  
330 0 0 0 330  
60 0 0 0 60  
120 0 0 0 120  
60 0 60 600 720  
930 0 210 60 1200  
0 1800 750 240 2790  
0 600 120 0 720  
0 0 480 0 480  
0 0 90 0 90  
0 0 150 0 150  
0 0 300 0 300  
0 0 150 0 150  
0 0 90 0 90  
0 0 0 270 270  
0 0 0 360 360  
0 0 0 60 60  
0 0 0 240 240  
0 0 0 570 570

JN [8 by 20 array of type char; element size 1 byte(s)]  
G00000008  
P047501A  
P047501T  
P047608A  
P047508E  
P047509A  
P047509T  
P047503T  
P047511A  
G00000005  
P047505T

P047502T  
P047511T  
P047509R  
P047508R  
P047512R  
P047504E  
P047509E  
P047507A  
P047502A

SNA [vector of type char of length 5; element size 1 byte(s)]  
MABEE

HSA [numeric vector of length 1; element size 8 byte(s)]  
0101412C5FA84857