

D.4 EXAMPLE USE OF STDS

RUN SS81:STDS*
#EXECUTION BEGINS

** SET-THEORETIC DATA STRUCTURE: INTERACTIVE DEMONSTRATION **
(2/18/70)

FOR AN EXPLANATION ENTER "1": (See Appendix D.1)

?GET(H)

FILE = CPSH1
ENTER PRINT FORMAT: (9I8)
DONE! L(*)= 9 C(*)= 5812 (0.2912 SEC)

H is the set of husbands (heads of households) (See Appendix D.3)

?GET(W)

FILE = CPSW1
ENTER PRINT FORMAT: (10I7)
DONE! L(*)= 10 C(*)= 5812 (0.3250 SEC)

W is the set of wives. (See Appendix D.3)

?SET(UNEM,4,6,5,7)

* DONE! L(*)= 1 C(*)= 4 (0.0036 SEC)

UNEM is the set of codes for "UNEMPLOYED"

?RS(5,H,UNEM,UH)

DONE! L(*)= 9 C(*)= 95 (0.4715 SEC)

UH is set of unemployed husbands

?XPAN(2,W,UH,WUH,1)

DONE! L(*)= 17 C(*)= 95 (0.5356 SEC)

WUH combines (matches) the wives of unemployed husbands in a set of 17-tuples (wife-husband relationships)

?IGTJ(WUH,4,11,OLDR)

DONE! L(*)= 17 C(*)= 13 (0.0023 SEC)

OLDR is the set of wives of unemployed husbands who are older than their husbands.

?RS(6,OLDR,UNEM,UNW)

DONE! L(*)= 17 C(*)= 1 (0.0023 SEC)

UNW is the set of unemployed wives of unemployed husbands who are older than their husbands.

?LIST(UNW,1,1,-1)

ENTER OUTPUT FORMAT: (5I10)

2006	0	1	57	2
5	9	6	3	6520
53	2	5	9	6
6	6321			

By examining this with the codes in Appendix D.3, it may be seen that we have located a 57 year old wife of a 53 old husband such that the FLOW (family income less own wages) for each is in excess of 6000 dollars. This may be due to pensions, interest, dividends, capital gains or other sources, explaining the basis of this data sample instance. Observe the CPU times used to find this result from an initial set of 5812.

Total time to do STDS operations = 1.644 sec.

?MTS

#SIGNOFF

#OFF AT 18:11.26

#ELAPSED TIME	1400.7	SEC.+ due largely to typed comments!
#CPU TIME USED	10.471	SEC.+ due largely to program "loadin
#STORAGE USED	929.573	PAGE-SEC. and "relocation"!
#DRUM READS	107	
#APPROX. COST OF THIS RUN	\$2.42	
#FILE STORAGE	841 PG-HR	\$.12

The above is an actual STDS session retyped for greater readability using italics to distinguish the comments.