

Scrolling

Word wrap and a scrollable display for the HP-28S

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WRAP · Disp

THE MANUAL

For WRAP, all that needs to be on the stack is a string. Same thing for Disp!

That one line is the whole manual. What the two programs do is turn a four-line display into a document reader: WRAP breaks a string into 24-character lines on word boundaries, and Disp shows four of them at a time and moves through the rest on the UP and DOWN keys.

THE PROGRAMS

```
WRAP
« ""
  WHILE OVER SIZE 24 >
  REPEAT OVER DUP
    IF 1 24 SUB DUP 10 CHR POS DUP NOT
    THEN DROP
      IF " " POS
      THEN 25
        DO 1 - DUP2 DUP SUB
        UNTIL " " ==
      END
    ELSE 12
    END
  END DUP → j
  « 1 - 1 SWAP SUB 10 CHR + + SWAP j 1 +
  » OVER SIZE SUB SWAP
END SWAP +
»

Disp
« CLLCD ""
DO OVER 1 DISP
DO KEY
UNTIL
END DUP → k
«
```

```
IF "UP" ==  
THEN SWAP  
END OVER DUP 10 CHR POS → j  
« 1 j SUB SWAP + SWAP j  
» 1 + OVER SIZE SUB  
IF k "DOWN" ==  
THEN SWAP  
END k  
»  
UNTIL DUP "UP" ≠ SWAP "DOWN" ≠ AND  
END DROP2 CLMF  
»
```

NOTES ON THIS EDITION

1. This is the “scrolling” Selden’s 1990 paper names among what the class produced.
2. The paper prints three programs — WRAP, Disp and MVS. The notebook has no MVS: its body has been folded into Disp. Here the notebook is the later of the two versions, which is the opposite of Space Chase.

The notebook is the manuscript — handwritten, photocopied, and reproduced exactly as scanned at michaelmorrison.com/downloads/hp28s/scrolling-notebook.pdf. This is the edited edition. The wording and the voice are the manuscript’s and the program listings are unaltered; where the prose has been corrected, the notes above say what was changed, so the two can be held against each other.