
* FOR loop in 68000

*

* First Array Element to Process: TOP

* Last Array Element to Process: BOT

* The array: DATA

*

* Used to Index into array: DO

* Used as Pointer to array: AO

*

*

```
000000 00          DATA   DS   500          ;array of bytes
0001F4 0000          TOP    DC    0          ;first to process
0001F6 0000          BOT    DC    0          ;last to process
```

*

*

;other data

;and code

*

*

* Assumes TOP & BOT previously calculated

*

```
0001FB 41F900000000          LEA   DATA,AO      ;set pointer
0001FE 3039000001F4          MOVE  TOP,DO        ;init index
000204 B079000001F6      LOOP   CMP   BOT,DO        ;check bounds
00020A 6206          BHI.S  LABEL        ;end loop
0020C  42300000          CLR.B  O(AO,DO)      ;loop body
000210 60F2          BRA.S  LOOP        ;repeat
          LABEL
000212          END
```

MODULE TRIAL;

VAR

DATA : ARRAY [1..500] OF CHAR;

TOP, BOT, i : CARDINAL;

BEGIN

(* Assumes TOP & BOT have been previously calculated *)

FOR i := TOP TO BOT DO