

```

length movem.l  a0,-(sp)
      clr.w     d0
loop   cmpa.l   #0,a0
      beq      exit
      addq.w   #1,d0
      movea.l  (a0),a0
      bra     loop
exit   movem.l  (sp)+,a0
      rts

count  movem.l  a0/a2/d0,-(sp)
      movea.l  a0,a2
zeros  clr.w    (a2)+
      dbra   d0,zeros
loop   cmpa.l  #0,a0
      beq    exit
      move   4(a0),d0
      addq.w #1,(a1,d0.w)
      movea.l (a0),a0
      bra   loop
exit   movem.l (sp)+,a0/a2/d0
      rts

```