```
Program Keycodes: 67 bytes in total
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```
~~R
{- Calculate current and voltage drop through multiple resistors in series
   Input: V(T) in X (stack)
                                              I = V/R
          R(i) in Rxn (registers)
  Output: I(T) in X
           V(i) in Rxn -}
                                      @@ R(T) initialized to 0.00 in X, V(T) pushed to Y
                                                                                                     KC_0
ENTER
                                      @@ R(T) pushed to Y, V(T) pushed to Z
                                                                                                     KC ENTER
FOR
                                      @@ loop over rows 0 to 3
                                                                                                    KCP_FOR
CNT INIT 1 # 0
                                      aa Cnt1 = 0
                                                                                                    KCP CNT INIT KC 1
                                                                                                                               KCP_NUMSEP KC_0
 COUNT< 4
                                      @@ loop as long as Cnt1 is < 4
                                                                                                    KCP_CLESSN
                                                                                                                   KC_4
   FOR
                                      @@ loop over columns 0 to 9
                                                                                                    KCP_FOR
    CNT_INIT 0 # 0
                                      aa Cnt0 = 0
                                                                                                    KCP_CNT_INIT KC_0
                                                                                                                               KCP_NUMSEP KC_0
    COUNT< 10
                                      @@ loop as long as Cnt0 is < 10
                                                                                                    KCP_CLESSN
                                                                                                                   KC_1
                                                                                                                               KC_0
     RCL CNTREF 1 CNTREF 0
                                      @@ Pull R(i)(j)=R(Cnt1)(Cnt0) into X
                                                                                                    KC RCLREG
                                                                                                                   KCP_CNT_REF KC_1
                                                                                                                                           KCP_CNT_REF KC_0
      IF X<>0
                                                                                                    KCP IF
                                                                                                                   KCP XNOT0
                                      @@ iteratively calc R(T) += R(i,j)
                                                                                                    KC_ADD
      ELSE
                                                                                                    KCP_ELSE
         CYCLE
                                      @@ silly example to show use of CYCLE instruction
                                                                                                    KCP_CYCLE
      ENDIF
                                                                                                    KCP_ENDIF
   NEXT 1
                                      @@ next column
                                                                                                    KCP_NEXT
                                                                                                                   KC 1
NEXT 1
                                      @@ next row
                                                                                                    KCP_NEXT
                                                                                                                   KC 1
\{-R(T) \text{ now in } X. \text{ Calculate I, duplicate it to Y, and use it to calc the V(i) } -\}
                                      @@ I in X, R(T) in Y
                                                                                                    KC_DIV
ENTER
                                      @@ I in X and Y, R(T) in Z
                                                                                                    KC_ENTER
FOR
                                      @@ loop over rows 0 to 3
                                                                                                    KCP_FOR
 CNT INIT 1 # 0
                                      aa Cnt1 = 0
                                                                                                    KCP_CNT_INIT KC_1
                                                                                                                               KCP_NUMSEP KC_0
 COUNT< 4
                                      @@ loop as long as Cnt1 is < 4
                                                                                                    KCP_CLESSN
                                                                                                                   KC 4
                                      @@ loop over columns 0 to 9
   FOR
                                                                                                    KCP FOR
    CNT_INIT 0 # 0
                                      @@ Cnt0 = 0
                                                                                                                   KC_0
                                                                                                    KCP_CNT_INIT
                                                                                                                               KCP_NUMSEP KC_0
                                      @@ loop as long as Cnt0 is < 10
    COUNT< 10
                                                                                                    KCP_CLESSN
                                                                                                                   KC_1
                                                                                                                               KC_0
                                      @@ Pull R(i)(j)=R(Cnt1)(Cnt0) into X
      RCL CNTREF 1 CNTREF 0
                                                                                                    KC_RCLREG
                                                                                                                   KCP_CNT_REF KC_1
                                                                                                                                           KCP_CNT_REF KC_0
                                      @@ Calc V(i) in X, I in Y, R(T) in Z
                                                                                                    KC MULT
      STO CNTREF 1 CNTREF 0
                                      @@ Store V(i) in Reg(i)(j)
                                                                                                    KC_STOREG
                                                                                                                   KCP_CNT_REF KC_1
                                                                                                                                           KCP_CNT_REF KC_0
     DROP
                                      @@ Drop X: I will be in X, R(T) in Y
                                                                                                    KC_DROPX
      ENTER
                                      @@ Duplicate I into Y, push R(T) to Z
                                                                                                    KC_ENTER
   NEXT 1
                                      @@ next column
                                                                                                                   KC_1
                                                                                                    KCP_NEXT
NEXT 1
                                      @@ next row
                                                                                                    KCP_NEXT
                                                                                                                   KC 1
DROP
                                      @@ Drop duplicate I
                                                                                                     KC DROPX
```

Program Listing