```
OOFS
        DL
                   R4
                         ; Begin end
  PO
        03
                         ; Call Initialize Link Table (for
        C4
  \mathbb{F}\Lambda
                         ;Outputting to text) 2nd entry
  ŢŢŢŢ
        D4
              SEP
                   R4
  FC
        03
                         ; Call Output Manager-(Halts program)
  PD
        E3
  T\Xi
              DEC
                         ; Halt (Just in case of a false return or
  FF
        00
              Filler
                         ; Later programming change)
                PUT INSTRUCTION IN MEMORY
        F_{c}
0100
             LDI
  01
        02
  02
        A6
             PLO
                   R6
                         :Set R6.0 = Loop Count of 2
  03
        4A
             LDA
                   RA
                         ;Get first of character pair
  04
                         ;Put in RE.1 for conversion
             PHI
        BE
                   RE
  05
        4A.
             LDA
                   RA
                         ;Get 2nd of character pair
  06
        AΞ
             PLO
                   RE
                         ; Put in RE.O for conversion
  07
        D4
             SEP
                   R4
  08
        02
                         ; Call ASCII to Hex Conversion
  09
        66
  0A
        9F
             GHI
                   RF
                         ;Get the converted byte
  0B
        59
             STR
                   R9
                         ;Store as Object Code
        19
  OC.
             INC
                   R9
                         ;Increment the pointer
        26
                         Decrement the Loop Counter
  OD
             DEC
                   R6
        86
             GLO
  OE
                   R6
  OF
        3A
             BNZ
                         ;Do the second pair
0110
        03
  11
        29
             DEC
                   R9
  12
        29
             DEC
                   R9
                         Reset R9 to point to Object Code just stored
  13
        D5
             SEP
                         ;Return
                   R5
                   SEARCH SYMBOL TABLE
0114
        F8
             LDI
                         ; Begin search new table
  15
        0A
  16
                         ;Set Rd = address Symbol Table @ OA00
        BD
             PHI
                   RD
  17
        F8
             LDI
  18
        00
  19
        AD
             PLO
                   RD
                         ;Begin continue search
        D4
                   R4
  1A
             SEP
  1 E
                         ;Call Test String (RA is reset)
        01
  10
        2F
  1D
        SE
             GLO
                   RE
                         ; If RE.0 \neq 00, continue
  1E
        3A
             BHZ
  1F
        21
0120
                         ;Else return (RE.0=00) RD points to address
        D5
             SEP
                   R5
        1D
                         ; Increment RD to next table entry
  21
              INC
                   RD
  22
        1D
              INC
                   RD
```