```
BAŞLA     YÜK   A,<$1000>           *LOAD*
          SOL   A                   *SHIFT LEFT*
          VE    A,$AA               *AND*
          YAZ   A,<$1001>           *STORE*
          YÜK   A,<$1000>           *LOAD*
          SAĞ   A                   *SHIFT LEFT*
          VE    A,$55               *AND*
          TOP   A,<$1001>           *ADD*
          YAZ   A,<$1001>           *STORE*
          KES
```

```
BAŞLA     YÜK   AB,<$1002>          *LOAD*
          TOP   AB,<$1022>          *ADD*
          YAZ   AB,$1010            *STORE - END ADDRESS OF THE NEW BLOCK*
          AKT   CD,AB               *TRANSFER*
          YÜK   SK,<$1002>          *LOAD*
BACKWARD  KAR   SK,<$1020>          *COMPARE - START OF THE INTERVAL*
          DEE   FORWARD             *BRANCH IF EQUAL*
          YÜK   A,<SK+0>            *LOAD*
          AZT   SK                  *DECREMENT INDEX REGISTER*
          YAZ   A,<CD>              *STORE*
          AZT   CD                  *DECREMENT*
          DAL   BACKWARD            *UNCONDITIONAL BRANCH*
FORWARD   YÜK   A,<SK+0>            *LOAD*
          YAZ   A,<CD>              *STORE*
          KES                       *END*
```

```
BAŞLA     YÜK   C,$00               *LOAD*
          YÜK   D,<$3000>
          AZT   D                   *DECREMENT*
BACKWARD  YÜK   SK,$1000            *LOAD*
          YÜK   B,<SK+CD+0>
          YÜK   SK,$1700
          TOP   B,<SK+CD+0>         *ADD*
          DEK   NEGATIVE            *BRANCH IF LOWER*
          YÜK   A,$00               *LOAD*
          DAL   FORWARD             *UNCONDITIONAL BRANCH*
NEGATIVE  YÜK   A,$FF               *LOAD*
FORWARD   YÜK   SK,$3700
          SOL   D                   *SHIFT LEFT*
          YAZ   AB,<SK+CD+0>        *STORE*
          SAĞ   D                   *SHIFT RIGHT*
          AZT   D                   *DECREMENT*
          KAR   D,$00               *COMPARE*
          DBE   BACKWARD            *BRANCH IF GREATER OR EQUAL*
          KES
```

```
BAŞLA        SİL    <$1000>              *CLEAR*
             SİL    <$1001>
             SİL    <$1002>
             SİL    <$1003>
             SİL    <$1005>
             SİL    C
             YÜK    SK,<$2000>           *LOAD*
             YÜK    B,<SK+0>
             YAZ    B,<$1004>            *STORE*
BACKWARD     YÜK    B,<SK+0>             *LOAD*
             SIN    B, $80               *TEST*
             DED    NEGATIVE             *BRANCH IF NOT EQUAL*
             SİL    A                    *CLEAR*
             TOP    AB,<$1000>           *ADD*
             YAZ    AB,<$1000>           *STORE*
             DAL    COMPARE              *UNCONDITIONAL BRANCH*
NEGATIVE     YÜK    A,$FF                *LOAD*
             TOP    AB,<$1002>           *ADD*
             YAZ    AB,<$1002>           *STORE*
COMPARE      YÜK    B,<SK+0>             *LOAD*
             KAR    B,<$1004>            *COMPARE*
             DEK    FORWARD              *BRANCH IF LOWER*
             YAZ    B,<$1004>            *STORE*
             YAZ    C,<$1005>
FORWARD      KAR    SK,<$2002>           *COMPARE*
             DEE    END                  *BRANCH IF EQUAL*
             ART    SK                   *INCREMENT*
             ART    C
             DAL    BACKARD              *UNCONDITIONAL BRANCH*
END          KES
```

Step	PS	SK	$1000	$1001	$1002	$1003	T	S	N	E
0	–	–	$48	$7A	$00	$00	0	0	0	0
1	$0010	$1000	$48	$7A	$00	$00	0	0	0	0
2	$0014	**$1001**	$48	$7A	$00	$00	0	0	0	0
3	$0018	$1001	$48	$7A	$00	$00	0	0	0	0
4	$001B	$1001	$48	$7A	$00	$00	0	0	**1**	0
5	$001D	$1001	$48	$7A	$00	$00	0	0	1	0
6	$001F	$1001	$48	$7A	$00	$00	**1**	0	0	0
7	$0021	$1001	$48	$7A	$00	$00	1	0	0	0
8	$0030	$1001	$48	$7A	$00	**$C2**	0	0	**1**	0
9	$0034	$1001	$48	$7A	**$7A**	$C2	0	0	0	0
10	$0038	$1001	$48	$7A	$7A	$C2	0	0	0	0

a. $FF
b. 06 $2C - $25 - $01 = $06
c. <CD>
d. CEVRIM $EE = -18, $2B + $EE + $01 = $1A

A	B	$0040	$1100	$1101	$1102	$1103	$1104	$1105
–	–	$00	$AA	$FF	$AA	$55	$FF	$62
–	$00	–	–	–	–	–	–	–
$46	–	–	–	–	–	–	–	–
–	–	–	$46	–	–	–	–	–
–	$01	–	–	–	–	–	–	–
$55	–	–	–	–	–	–	–	–
–	–	–	–	$55	–	–	–	–
–	$02	–	–	–	–	–	–	–
$82	–	–	–	–	–	–	–	–
–	–	–	–	–	$82	–	–	–
–	$03	–	–	–	–	–	–	–
$A5	–	–	–	–	–	–	–	–
–	–	–	–	–	–	$A5	–	–
–	$04	–	–	–	–	–	–	–
$FF	–	–	–	–	–	–	–	–
–	–	$04	–	–	–	–	–	–
$FF	$04	$04	$46	$55	$82	$A5	–	–

                                    – means same as before

```
BAŞLA       YÜK   SK, $1000        *LOAD*
            YÜK   CD, $1100        *LOAD*
            SİL   B                *CLEAR*
LOOP        KAR   B, <$0FFF>       *COMPARE*
            DEE   END              *BRANCH IF EQUAL*
            ART   B                *INCREMENT*
            YÜK   A, <SK+0>+1      *LOAD WITH INCREMENT*
            KAR   A,<$0FFE>        *COMPARE*
            DİE   LOOP             *COMPARE IF LARGER OR EQUAL*
            YAZ   A, <CD>          *STORE*
            ART   D                *INCREMENT*
            DAL   LOOP             *UNCONDITIONAL BRANCH*
END         YAZ   D, <$10FF>       *STORE*
            KES
```