Location	Instruction			AC
100	5103	BSA	103	(FFFE)
101	7200	CMA		
102	7001	HLT		
103	0000	(5101)		0000
104	7800	CLA		0001
105	7020	INC		
106	C103	BUN	103 I	

بعد از HALT مقدار AC، FFFE است.

و کلمه موجود در آدرس ۱۰۳، ۱۰۱ است.

A−B < 0 :	10	LDA	B	
		CMA		
A−B = 0 :	20	INC		
		ADD	A	/ form A−B
A−B > 0 :	30	SPA		/ skip if AC pos
		BUN	N10	/ A−B<0 to N10
		SZA		/ skip if AC zero
		BUN	N30	/ A−B>0 to N30
		BUN	N20	/ A−B =0 to N20

```
        LDA     A           / Load
        SZA                 / if zero .
        BUN     NZR
        HLT                 / A zero, product zero in AC
NZR,CMA
        INC
        STA     CTR         / Store -A in Counter
        CLA                 / Start with AC = 0
LOP, ADD    B               / Add Multiplicants
        ISZ     CTR
        BUN     LOP         / Repeat Loop A times
        HLT
A, DEC      -               / Multiplier
B, DEC      -               / Multiplicand
CTR, HEX    0               / Counter
        END
```

Calling

```
                            CMA
    BSA     CMP             INC
    HEX     100             STA     CTR
    DEC     32          LOP, LDA     PTR I
                            CMA
```

Subroutine

```
                                STA     PTR I
    CMP,    HEX     0           ISZ     PTR
            LDA     CMP I       ISZ     CTR
                                BUN     LOP
            STA     PTR
            ISZ     CMP         ISZ     CMP
            LDA     CMP I       BUN     CMP I

                            PTR,    —

                            CTR,    —
```