Addition:

In

Src val 0

Dest reg R00

In

Src val 0

Dest reg R01

Sub

Src val 48

Dest reg R00

Sub

Src 48

Dest R01

ADD

Src reg R01

Dest reg R00

CMP

Src Val 9

Dest Reg R00

Jle 31

Add

Src val 7

Dest reg R00

Add

Src val 48

Dest reg R00

Out

Src reg R00

Dest val 1

HLT

Successive addition:

Mov

Src val 5

Dest R00

Mov

Src val 6

Dest R01

Mov

Src val 0

Dest R02

ADD

Src R01

Dest R02

DEC R00

JNZ ADD addr

HLT