1. parseLMC " INP//some comments\nSTART STA FIRST//\n LDA FIRST\n SUB SECOND\n OUT\nlabel2 HLT\nFIRST DAT 3\nSECOND DAT 5\n"

[(Nothing,INP),(Just "START",STA FIRST),(Nothing,LDA FIRST),(Nothing,SUB SECOND),(Nothing,OUT),(Just "label2",HLT),(Just "FIRST",DAT 3),(Just "SECOND",DAT 5)]

2. putStrLn $ showProgram $ parseLMC " INP//some comments\nSTART STA FIRST//\n LDA FIRST\n SUB SECOND\n OUT\nlabel2 HLT\nFIRST DAT 3\nSECOND DAT 5\n"

INP

START STA FIRST

LDA FIRST

SUB SECOND

OUT

label2 HLT

FIRST DAT 3

SECOND DAT 5

3.mkInitEnv $ parseLMC " INP//some comments\nSTART STA FIRST//\n LDA FIRST\n SUB SECOND\n OUT\n HLT\nFIRST DAT 3\nSECOND DAT 5\n"

Env {mailboxes = [("FIRST",3),("SECOND",5)], accumulator = Nothing, pc = 1, instructions = [INP,STA FIRST,LDA FIRST,SUB SECOND,OUT,HLT,DAT 3,DAT 5], labelAddr = [("START",1),("FIRST",6),("SECOND",7)]}

* Question: DAT作为initialization是否算在instructions内？
* 如果上问回答为否，则labelAddr中应当不包含那些DAT的label咯？

4. putStrLn $ showProgram $ parseLMC "START LDA ZERO\n STA RESULT\n STA COUNT\n INP\n BRZ END\n STA VALUE\nLOOP LDA RESULT\n ADD VALUE\n STA RESULT\n LDA COUNT\n ADD ONE\n STA COUNT\n SUB VALUE\n BRZ ENDLOOP\n BRA LOOP\nENDLOOP LDA RESULT\n OUT\n BRA START\nEND HLT\nRESULT DAT\nCOUNT DAT\nONE DAT 1\nVALUE DAT \nZERO DAT\n"

START LDA ZERO

STA RESULT

STA COUNT

INP

BRZ END

STA VALUE

LOOP LDA RESULT

ADD VALUE

STA RESULT

LDA COUNT

ADD ONE

STA COUNT

SUB VALUE

BRZ ENDLOOP

BRA LOOP

ENDLOOP LDA RESULT

OUT

BRA START

END HLT

RESULT DAT 0

COUNT DAT 0

ONE DAT 1

VALUE DAT 0

ZERO DAT 0

5. evalProgram $ parseLMC "START LDA ZERO\n STA RESULT\n STA COUNT\n INP\n BRZ END\n STA VALUE\nLOOP LDA RESULT\n ADD VALUE\n STA RESULT\n LDA COUNT\n ADD ONE\n STA COUNT\n SUB VALUE\n BRZ ENDLOOP\n BRA LOOP\nENDLOOP LDA RESULT\n OUT\n BRA START\nEND HLT\nRESULT DAT\nCOUNT DAT\nONE DAT 1\nVALUE DAT \nZERO DAT\n"

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