This is a trivial example of assembling and testing a program. It should work for anyone logged in to rabbit. It shows every keypress, even down to the 1 being used to show when I press ENTER. What I type is in **bold**, everything else came from the computer. This sample shows just entering a program, assembling it, and single-stepping through it. For anything else, see the proper documentation.

```
$ pico testprog.ass 1
1
        .makeexe
1
                r1, 1
        load
                        1
loop:
        load
                r2, 34
                r1, r2
                        1
        mul
                        1
        inc
                r1
                        1
        jump
                loop
1
$ assemble testprog 1
$ emulator testprog 1
No 'system.setup' in currecnt directory, reading '/usr/local/bin/system.setup'
disc 1 from file 'maindrive.disc', 6000 blocks
set SP A COMPANIENT Project Exam Help
load file 'testprog.exe' starting at 0x00000400
> 1
   R0 = 0
                                                          R12= 0
   R1 = 0
                                                          SP = 0x80000000
                                       R10= 0
   R2 = 0
                                                          FP = 0 \times 000000000
                                       R11=0
   R3 = 0
                     R7 = 0
                                                          PC = 0x00000400
   FLAGS = 0 \times 0000
00000400: (02100001)
                       LOAD
                               R1, 1
   R0 = 0
                     R4 = 0
                                       R8 = 0
                                                          R12 = 0
   R1 = 1
                     R5 = 0
                                       R9 = 0
                                                          SP = 0x80000000
   R2 = 0
                     R6 = 0
                                       R10= 0
                                                          FP = 0 \times 000000000
                     R7 = 0
                                                          PC = 0x00000401
   R3 = 0
                                       R11= 0
   FLAGS = 0x00000031: R ~Z ~N ~ERR SYS IP ~VM
                               R2, 34
00000401: (02200022)
                       LOAD
   R0 = 0
                     R4 = 0
                                       R8 = 0
                                                          R12= 0
   R1 = 1
                     R5 = 0
                                       R9 = 0
                                                          SP = 0x80000000
   R2 = 34
                     R6 = 0
                                       R10= 0
                                                          FP = 0x00000000
                     R7 = 0
                                                          PC = 0x00000402
   R3 = 0
                                       R11= 0
   FLAGS = 0x00000031: R ~Z ~N ~ERR SYS IP ~VM
                               R1, R2
                                        > 1
00000402: (10120000)
                       MUL
                                                          R12= 0
   R0 = 0
                     R4 = 0
                                       R8 = 0
   R1 = 34
                     R5 = 0
                                       R9 = 0
                                                          SP = 0x80000000
                     R6 = 0
   R2 = 34
                                       R10= 0
                                                          FP = 0 \times 000000000
   R3 = 0
                     R7 = 0
                                       R11= 0
                                                          PC = 0x00000403
   FLAGS = 0 \times 000000031: R \simZ \simN \simERR SYS IP \simVM
```

```
00000403: (08010000) INC R1 \rightarrow 1
   R0 = 0
                  R4 = 0
                                     R8 = 0
                                                     R12= 0
   R1 = 35
                    R5 = 0
                                     R9 = 0
                                                     SP = 0x80000000
                                                     FP = 0x000000000
                    R6 = 0
   R2 = 34
                                     R10= 0
                   R7 = 0
   R3 = 0
                                    R11= 0
                                                      PC = 0 \times 00000404
   FLAGS = 0x00000031: R \simZ \simN \simERR SYS IP \simVM
   PC-4 = 0x00000401 = 1025
                             PC-4 \rightarrow 1
00000404: (320FFFFC) JUMP
   R0 = 0
                    R4 = 0
                                     R8 = 0
                                                      R12= 0
                                                     SP = 0x80000000
   R1 = 35
                    R5 = 0
                                     R9 = 0
                                                     FP = 0x000000000
   R2 = 34
                    R6 = 0
                                     R10= 0
                                                     PC = 0x00000401
   R3 = 0
                    R7 = 0
                                     R11= 0
   FLAGS = 0x00000031: R ~Z ~N ~ERR SYS IP ~VM
00000401: (02200022) LOAD R2, 34 \rightarrow 1
   R0 = 0
                    R4 = 0
                                     R8 = 0
                                                      R12= 0
   R1 = 35
                    R5 = 0
                                     R9 = 0
                                                      SP = 0 \times 800000000
   R2 = 34
                    R6 = 0
                                     R10= 0
                                                     FP = 0x000000000
                    R7 = 0
   R3 = 0
                                     R11= 0
                                                       PC = 0 \times 00000402
   FLAGA-SSIGNIMENT-Project
00000402: (10120000) MUL R1, R2 \rightarrow 1
               https://tutorescom
                                                      R12= 0
                                                    SP = 0x80000000
   R1 = 1190
                    R6 = 0
   R2 = 34
                                     R10= 0
                                                    FP = 0 \times 000000000
                    R7 = 0
                                                      PC = 0x00000403
   R3 = 0
                                     R11 = 0
   FLAGS = 0 \times 000000031: B \sim 7 \sim N \sim ERR SYS IP \sim VM
                             R1 \rightarrow 1
00000403: (08010000)
                      INC
                                                      R12= 0
   R0 = 0
                    R4 = 0
                                     R8 = 0
                  R5 = 0
                                     R9 = 0
                                                     SP = 0x80000000
   R1 = 1191
                   R6 = 0
   R2 = 34
                                    R10= 0
                                                     FP = 0x000000000
                    R7 = 0
                                                      PC = 0x00000404
   R3 = 0
                                     R11= 0
   FLAGS = 0 \times 000000031: R \simZ \simN \simERR SYS IP \simVM
   PC-4 = 0x00000401 = 1025
00000404: (320FFFFC) JUMP PC-4 \rightarrow 1
   R0 = 0
                    R4 = 0
                                   R8 = 0
                                                     R12= 0
   R1 = 1191
                    R5 = 0
                                     R9 = 0
                                                     SP = 0x800000000
                                                      FP = 0x000000000
   R2 = 34
                    R6 = 0
                                     R10= 0
                             R11= 0
   R3 = 0
                    R7 = 0
                                                      PC = 0x00000401
   FLAGS = 0x00000031: R ~Z ~N ~ERR SYS IP ~VM
00000401: (02200022) LOAD R2, 34 \rightarrow 1
                    R4 = 0
   R0 = 0
                                     R8 = 0
                                                     R12= 0
                    R5 = 0
   R1 = 1191
                                     R9 = 0
                                                     SP = 0x80000000
                                                     FP = 0x00000000
                   R6 = 0 R10= 0
R7 = 0 R11= 0
   R2 = 34
   R3 = 0
                                                     PC = 0x00000402
   FLAGS = 0x00000031: R ~Z ~N ~ERR SYS IP ~VM
```

```
00000402: (10120000) MUL R1, R2 \rightarrow 1
  R0 = 0
                   R4 = 0
                                     R8 = 0
                                                    R12= 0
  R1 = 0x00009E2E
                   R5 = 0
                                     R9 = 0
                                                     SP = 0x80000000
  R2 = 34
                   R6 = 0
                                     R10= 0
                                                    FP = 0x000000000
  R3 = 0
                   R7 = 0
                                     R11= 0
                                                     PC = 0x00000403
  FLAGS = 0x00000031: R ~Z ~N ~ERR SYS IP ~VM
                           R1 \rightarrow 1
00000403: (08010000) INC
                   R4 = 0
  R0 = 0
                                     R8 = 0
                                                      R12= 0
                                                     SP = 0x80000000
  R1 = 0 \times 00009E2F
                   R5 = 0
                                     R9 = 0
  R2 = 34
                   R6 = 0
                                     R10= 0
                                                     FP = 0 \times 000000000
  R3 = 0
                   R7 = 0
                                     R11= 0
                                                     PC = 0 \times 00000404
  FLAGS = 0x00000031: R ~Z ~N ~ERR SYS IP ~VM
  PC-4 = 0x00000401 = 1025
00000404: (320FFFFC) JUMP PC-4 > 1
                                                    R12= 0
  R0 = 0
                   R4 = 0
                                     R8 = 0
  R1 = 0x00009E2F
                   R5 = 0
                                     R9 = 0
                                                    SP = 0x80000000
  R2 = 34
                    R6 = 0
                                     R10= 0
                                                      FP = 0x000000000
  R3 = A S. Signingent - Project ]
                                               Exam Help
00000401: (02200022) LOAD
                             R2, 34 > [control-c]
> [control-c]
              https://tutorcs.com
> [control-c]
$ ls -1 testprog* l
-rw-r--r-- 1 sratbag class 81 Sep 21 17:34 testprog.ass
-rw-r--r-- 1 sratbag class 20 Sep 21 17:34 testprog.exe
$ WeChat: CStutorCS
```