```
[hickejus@eos06 temperature-stabilizer-main]$ clang temp.c -lm
[hickejus@eos06 temperature-stabilizer-main]$ ./a.out
status
Alpha = 0.90
                K = 200.0
                                      Delay = 250
Central temp is 0.00
ctemp 29
Central temp is now 29.00
external 30 70 31 40 90
Create 5 external processes
Process 2203355: set initial temperature to 30.00
Process 2203356: set initial temperature to 70.00
Process 2203357: set initial temperature to 31.00
Process 2203358: set initial temperature to 40.00
Process 2203359: set initial temperature to 90.00
etemp 2203356 33
2203356: Ext. temperature set to 33.00
status
Alpha = 0.90 K = 200.0
                                          Delay = 250
Central temp is 29.00
 # PID Enabled Temperature
1 2203355 YES
                              30.00
```

```
2203356
                                     33.00
   2203357
2203358
                       YES
                                      31.00
4
                                      40.00
    2203359
                                      90.00
alpha 0.2
2203356: set alpha to : 0.200000
2203359: set alpha to : 0.200000
2203355: set alpha to : 0.200000
2203358: set alpha to : 0.200000
2203357: set alpha to : 0.200000
delay 500
Delay set to 500
status
Alpha = 0.20 K = 200.0
                                                 Delay = 500
Central temp is 29.00
 # PID Enabled Temperature
   2203355
                                  30.00
    2203356
2203357
                       YES
                                       33.00
                       YES
                                       31.00
3
    2203358
                     YES
                                      40.00
   2203359
                       YES
                                      90.00
start
Temperatures: [29.00] 30.00 33.00 31.00 40.00 90.00 
Temperatures: [29.08] 29.20 29.80 29.40 31.20 41.20
Temperatures: [29.09] 29.04 29.16 29.08 29.44 31.44
Temperatures: [29.09] 29.04 29.16 29.08 29.44 31.44 Temperatures: [29.09] 29.07 29.09 29.08 29.15 29.55 Temperatures: [29.09] 29.08 29.09 29.09 29.10 29.18 Temperatures: [29.09] 29.09 29.09 29.09 29.09 29.11 Temperatures: [29.09] 29.09 29.09 29.09 29.09 29.09 29.09 Temperatures: [29.09] 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09 29.09
The system stabilized at 29.091 disable 2203358
2203358 is disabled
kill 2203356
2203356 is shutting down
ctemp 5
Central temp is now 5.00
alpha .7
2203355: set alpha to : 0.700000
2203357: set alpha to : 0.700000
2203359: set alpha to : 0.700000
```

```
2203359: set alpha to : 0.700000
2203358: set alpha to : 0.700000
status
Alpha = 0.70
                K = 200.0
                                Delay = 500
Central temp is 5.00
      PID
            Enabled Temperature
               YES
1
    2203355
                         29.09
2
    2203356
               NO
                         29.09
3
    2203357
               YES
                         29.09
                         29.09
4
    2203358
               NO
               YES
    2203359
                         29.09
start
Temperatures: [5.00] 29.09 29.09 29.09
Temperatures: [5.36] 29.09 29.09 29.09
Temperatures: [5.60] 21.86 21.86 21.86
Temperatures: [5.76] 16.80 16.80 16.80
Temperatures: [5.88] 13.37 13.37 13.37
Temperatures: [5.95] 11.04 11.04 11.04
Temperatures: [6.00] 9.45 9.45 9.45
Temperatures: [6.04] 8.38 8.38 8.38
Temperatures: [6.06] 7.65 7.65 7.65
Temperatures: [6.08] 7.16 7.16 7.16
Temperatures: [6.09] 6.82 6.82 6.82
Temperatures: [6.09] 6.59 6.59 6.59
Temperatures: [6.10] 6.44 6.44 6.44
Temperatures: [6.10] 6.33 6.33 6.33
Temperatures: [6.10] 6.26 6.26 6.26
Temperatures: [6.11] 6.21 6.21 6.21
Temperatures: [6.11] 6.18 6.18 6.18
Temperatures: [6.11] 6.16 6.16 6.16
Temperatures: [6.11] 6.14 6.14 6.14
Temperatures: [6.11] 6.13 6.13 6.13
Temperatures: [6.11] 6.12 6.12 6.12
Temperatures: [6.11] 6.12 6.12 6.12
Temperatures: [6.11] 6.11 6.11 6.11
The system stabilized at 6.106
enable 2203358
2203358 is enabled
status
Alpha = 0.70
                K = 200.0
                                Delay = 500
Central temp is 6.11
     PID
           Enabled Temperature
               YES
    2203355
                         6.11
2
    2203356
               NO
                         29.09
               YES
    2203357
                         6.11
                         29.09
   2203358
              YES
```

```
2203358
               YES
                         29.09
    2203359
               YES
                        6.11
ctemp 2
Central temp is now 2.00
Temperatures: [2.00] 6.11 6.11 29.09 6.11
Temperatures: [2.19] 6.11 6.11 29.09 6.11
Temperatures: [2.34] 6.11 6.11 20.96 6.11
Temperatures: [2.44] 4.87 4.87 15.27 4.87
Temperatures: [2.51] 4.01 4.01 11.35 4.01
Temperatures: [2.55] 3.46 3.46 8.65 3.46
Temperatures: [2.58] 3.13 3.13 6.78 3.13
Temperatures: [2.60] 2.92 2.92 5.50 2.92
Temperatures: [2.61] 2.80 2.80 4.62 2.80
Temperatures: [2.63] 2.63 2.63 2.65 2.63
Temperatures: [2.63] 2.63 2.63 2.64 2.63
Temperatures: [2.63] 2.63 2.63 2.64 2.63
Temperatures: [2.63] 2.63 2.63 2.64 2.63
Temperatures: [2.63] 2.63 2.63 2.63 2.63
The system stabilized at 2.630
status
Alpha = 0.70
               K = 200.0
                               Delay = 500
Central temp is 2.63
    PID Enabled Temperature
               YES
                        2.63
    2203355
    2203356
              NO
                        29.09
    2203357
               YES
                        2.63
    2203358
               YES
                        2.63
    2203359
               YES
                        2.63
quit
2203355 is shutting down
2203357 is shutting down
2203358 is shutting down
2203359 is shutting down
[hickejus@eos06 temperature-stabilizer-main]$
```