```
1
2
      #include <stdlib.h>
      #include <stdio.h>
3
      #include <string.h>
4
5
      #include <unistd.h>
      #include <sys/wait.h>
6
      #include <sys/time.h>
7
8
9
            ignore\_errors = 0;
      char
10
      char
             verbose
                            = 0;
11
      char *argfile
                           = NULL;
12
13
      char
             error_seen
                             = 0;
14
15
      char **fa_argv;
16
      int
               fa_argc;
      void print_argv(char **args)
17
18
      {
19
         int i=0;
20
         while(args[i]) printf("%s ",args[i++]);
21
         printf("\n");
22
      }
23
24
      int set_opts(int argc, char** argv)
25
      {
26
         int i=1;
27
         while(i<argc)</pre>
28
29
            if(arqv[i][0] == '-')
30
31
              int pos = 1, len = strlen(argv[i]);
32
              while(pos && pos < len)</pre>
33
              {
34
                 char o = argv[i][pos];
                 //printf(" %c ",o);
35
                 switch(o)
36
37
                 {
                    case 'i':
38
                       ignore_errors = 1;
39
40
                       pos++;
41
                       break;
                    case 'v':
42
43
                       verbose = 1;
44
                       pos++;
45
                       break;
                    case 'a':
46
47
                       argfile = argv[++i];
```

```
48
                       pos=0;
49
                       break;
50
                    default:
                       printf("Unknown option %c\n",o);
51
52
                       exit(1);
                       break;
53
54
                 }
55
56
57
            else return i;
58
            i++;
59
60
         return 0;
      }
61
62
      void read_file(char *argfile)
63
64
65
         FILE *af = fopen(argfile,"r");
         char **args = (char **)malloc(sizeof(char**)*64);
66
         int argc = 0;
67
         char buf[128];
68
         while((fscanf(af,"%s",buf))!=EOF)
69
70
         {
71
            unsigned int size = strlen(buf);
72
            char *arg = (char *)malloc(size);
73
            strncpy(arg,buf,size);
            args[argc++] = arg;
74
75
         args[argc] = NULL;
76
77
         fa_argv = args;
78
         fa_argc = argc;
79
      }
80
81
82
83
      char **append_args(int argc, char** argv)
84
      {
85
         char **new_args = (char **)malloc(sizeof(char **) * (argc + fa_argc + 1));
         //printf("%d %d %d\n", argc, fa_argc, argc+fa_argc);
86
         memcpy(new_args, argv, argc*sizeof(char **));
87
         memcpy(new_args + argc, fa_argv,fa_argc*sizeof(char**));
88
89
         new_args[argc+fa_argc] = NULL;
90
         return new_args;
91
      }
92
93
      int child_pid;
94
      void timeout_handler(int a)
95
96
         kill(child_pid,9);
```

```
97
         printf("hihihi\n");
      }
98
99
100
      void milli_alarm(long int ms)
101
102
         struct itimerval old, new;
         new.it_interval.tv_usec = 0;
103
         new.it_interval.tv_sec = 0;
104
105
         new.it_value.tv_sec = 0;
106
         new.it_value.tv_usec = 1000*ms;
         setitimer(ITIMER_VIRTUAL, &new, NULL);
107
      }
108
109
110
      FILE *f;
111
      int main(int argc,char** argv,char *envp[])
112
      {
113
         int a;
         f = stdin;
114
115
         if((a = set_opts(argc,argv))) f = fopen(argv[a],"r");
116
         if(argfile != NULL) read_file(argfile);
117
118
119
         //printf("%d %d %s\n",ignore_errors,verbose,argfile);
120
         char input[128];
121
         int stat = 0;
122
         while(fgets(input,sizeof(input),f)!=NULL)
123
         {
124
            unsigned int j = 0;
125
            input[strlen(input)-1] = '\0';
126
            if(input[0] !='#')
127
            {
128
               char* toks[64];
129
               char* token;
130
               token = strtok(input," ");
131
              while(token !=NULL)
132
133
                  toks[j++] = token;
                 token = strtok(NULL," ");
134
135
              }
              toks[j] = NULL;
136
137
138
               char **args;
139
              if(argfile != NULL) args = append_args(j,toks);
              else args = toks;
140
141
142
               if(verbose) print_argv(args);
143
144
               switch(child_pid = fork())
145
```

```
146
                 case -1:
147
                   exit(1);
148
                 case 0:
149
                   stat = execvp(args[0],args);
                   printf("hello\n");
150
151
                   exit(stat);
152
                 default:
153
                   signal(SIGALRM,timeout_handler);
154
                   milli_alarm(1);
155
                   waitpid(child_pid,&stat,0);
                   printf("done\n");
156
157
                   if(argfile != NULL) free(args);
158
              }
159
160
              int exitstat = WEXITSTATUS(stat);
161
              if (exitstat)
162
              {
163
                 if(ignore_errors) error_seen = 1;
164
                 else
165
                 {
166
                   if(exitstat == 255) exit(1);
167
                   else exit(1);
168
                 }
169
170
           }
171
         }
172
         return 0;
173
```