

```
1 #include <unistd.h>
2 #include <stdlib.h>
3 #include <stdio.h>
4 #include <string.h>
5 #include <fcntl.h>
6 #include <sys/types.h>
7 #include <sys/stat.h>
8
9 #define FIFO_NAME "/tmp/myfifo"
10
11 int main(int argc, char *argv[]) /* Oversimplified */
12 {
13     int fd, i, mode = 0;
14     char c;
15
16     if (argc < 2) {
17         fprintf(stderr, "Usage: %s <O_RDONLY | O_WRONLY | O_NONBLOCK>\n", argv[0]);
18         exit(EXIT_FAILURE);
19     }
20
21     for(i = 1; i < argc; i++) {
22         if (strncmp(++argv, "O_RDONLY", 8) == 0)
23             mode |= O_RDONLY;
24         if (strncmp(*argv, "O_WRONLY", 8) == 0)
25             mode |= O_WRONLY;
26         if (strncmp(*argv, "O_NONBLOCK", 10) == 0)
27             mode |= O_NONBLOCK;
28     }
29
30     if (access(FIFO_NAME, F_OK) == -1) mkfifo(FIFO_NAME, 0777);
31
32     printf("Process %d: FIFO(fd %d, mode %d) opened.\n",
33           getpid(), fd = open(FIFO_NAME, mode), mode);
34
35     if( (mode == 0) | (mode == 2048) )
36         while( read(fd,&c,1) == 1 ) putchar(c);
37
38     if( (mode == 1) | (mode == 2049) )
39         while( (c = getchar()) != EOF ) write(fd,&c,1);
40
41     exit(EXIT_SUCCESS);
42 }
```