

```
int main(int argc, char *argv[])
{
    int fd, i, mode = 0;
    char c;

    if (argc < 2) {
        fprintf(stderr, "Usage: %s <O_RDONLY | O_WRONLY | O_NONBLOCK>\n", argv[0]);
        exit(EXIT_FAILURE);
    }

    for(i = 1; i < argc; i++) {
        if (strncmp(++argv, "O_RDONLY", 8) == 0)
            mode |= O_RDONLY;
        if (strncmp(*argv, "O_WRONLY", 8) == 0)
            mode |= O_WRONLY;
        if (strncmp(*argv, "O_NONBLOCK", 10) == 0)
            mode |= O_NONBLOCK;
    }

    if (access(FIFO_NAME, F_OK) == -1) mkfifo(FIFO_NAME, 0777);

    printf("Process %d: FIFO(fd %d, mode %d) opened.\n",
        getpid(), fd = open(FIFO_NAME, mode), mode);

    if( (mode == 0) | (mode == 2048) )
        while( read(fd,&c,1) == 1 ) putchar(c);

    if( (mode == 1) | (mode == 2049) )
        while( (c = getchar()) != EOF ) write(fd,&c,1);

    exit(EXIT_SUCCESS);
}
```