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#include <stdio.h>
#include <stdlib.h>
#include <fcntl.h>
#include <sys/stat.h>
#include <sys/time.h>
#include <sys/types.h>
#include <unistd.h>
#include <errno.h>

int main() {
    int fd = open("tmpfile", O_RDONLY | O_NONBLOCK);
    if (-1 == fd) {
        perror("failed to open file");
        return 1;
    }

    printf("fd: %d\n", fd);
    fcntl(fd, F_SETFL, fcntl(fd, F_GETFL) | O_NONBLOCK);

    char buffer[100];
    while (1)
    {
        ssize_t nread = read(fd, buffer, 10);
        if (-1 == nread) {
            if (errno == EAGAIN) {
                printf("stop the blocking call to read\n");
            } else {
                perror("something wrong");
            }
            sleep(1);
            continue;
        }
        else if (0 == nread) {
            if (errno == EAGAIN) {
                printf("stop the blocking call to read\n");
                sleep(1);
                continue;
            } else {
                // end of file?
                break;
            }
        } else {
            buffer[nread] = '\0';
            printf("new data: %s\n", buffer);
        }
    }
}

```

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}  
printf("Program ended\n");  
  
close(fd);  
  
return 0;  
}
```