

1. (a) First create a struct stat, then pass in the file name, and save it in the structure stat pointed to by the pointer buf. Return 0 if the execution is successful, and return 1 if it fails. Among them, the structure stat includes information such as file byte count, file type, etc., and the file byte count is obtained through buf.st\_size.

2. (b) If a signal is sent after the file is readable or writable, first obtain the file descriptor mark according to the fcntl function, and execute the open function to open the file according to this descriptor.

3. (c) getrusage() counts the resource usage of the process until the function getrusage() returns the system resource usage of who, which is determined by the return value of a pointer to the structure rusage. To determine the running time, the corresponding time is returned through ru\_utime and ru\_stime.

4. (d) If it is blocked by a signal, EINTR will be returned. If the execution is successful, a descriptor will be returned.

