

리눅스 시스템 프로그래밍 설계 및 실습 Quiz #12 (A)

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1. 하단의 실행결과가 나오도록 소스코드를 완성하시오.

<pre><ssu_setuid.c> #include <stdio.h> #include <stdlib.h> #include <unistd.h> int main(int argc, char *argv[]) { char line[256]; FILE *fp; int uid; if (argc < 2) { fprintf(stderr, "usage: %s file_name\n", argv[0]); exit(1); } printf("initially uid = %d and euid = %d\n", getuid(), geteuid()); fp = fopen(argv[1], "r"); if (fp == NULL) { fprintf(stderr, "first open error for %s\n", argv[1]); exit(1); } else { printf("first open successful:\n"); while (fgets(line, 255, fp) != NULL) fputs(line, stdout); fclose(fp); setuid(uid = getuid()); printf("after setuid(%d):\n uid=%d and euid=%d\n", uid, getuid(), geteuid()); fp = fopen(argv[1], "r"); if (fp == NULL) { fprintf(stderr, "second open error for %s\n", argv[1]); exit(1); } else { printf("second open successful:\n"); </pre>	<pre>while (fgets(line, 255, fp) != NULL) fputs(line, stdout); fclose(fp); } exit(0); }</pre> <p>실행 결과</p> <pre>/* A 사용자에서 첫 번째 실행 */ user1@localhost:/home/oslab\$ cat ssu_setuid_test RESTRICTED user1@localhost:/home/oslab\$./ssu_setuid ssu_setuid_test initially uid = 1001 and euid = 1001 first open successful: RESTRICTED after setuid(1001): uid=1001 and euid=1001 second open successful: RESTRICTED /* B 사용자에서 첫 번째 실행 */ user2@localhost:/home/oslab\$ id uid=1002(user2) gid=1002(user2) groups=1002(user2) user2@localhost:/home/oslab\$./ssu_setuid ssu_setuid_test initially uid = 1002 and euid = 1002 first open() of ssu_setuid_test failed /* A 사용자에서 두 번째 실행 */ user1@localhost:/home/oslab\$ id uid=1001(user1) gid=1001(user1) groups=1001(user1) user1@localhost:/home/oslab\$ sudo chmod u+s ssu_setuid user1@localhost:/home/oslab\$./ssu_setuid ssu_setuid_test initially uid = 1001 and euid = 1001 first open successful: RESTRICTED after setuid(1001): uid=1001 and euid=1001 second open successful: RESTRICTED /* B 사용자에서 두 번째 실행 */ user2@localhost:/home/oslab\$ id uid=1002(user2) gid=1002(user2) groups=1002(user2) user2@localhost:/home/oslab\$./ssu_setuid ssu_setuid_test initially uid = 1002 and euid = 1001 first open successful: RESTRICTED after setuid(1002): uid=1002 and euid=1002 second open() of ssu_setuid_test failed</pre>
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2. 다음 함수의 원형이 선언된 헤더파일, 원형, 반환값을 쓰시오.

<pre>execl()</pre> <pre>#include <unistd.h> int execl(const char *pathname, const char *argv0, ... /*(char *)0*/); 성공시 반환값 x, 에러시 -1(errno 설정)</pre>
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