(40)

#include <stdio.h>

#include <stdlib.h>

#include <sys/stat.h>

#include <pwd.h>

#include <grp.h>

void print\_permissions(mode\_t mode) {

printf("Permissions: ");

printf("%c", (mode & S\_IRUSR) ? 'r' : '-');

printf("%c", (mode & S\_IWUSR) ? 'w' : '-');

printf("%c ", (mode & S\_IXUSR) ? 'x' : '-');

printf("%c", (mode & S\_IRGRP) ? 'r' : '-');

printf("%c", (mode & S\_IWGRP) ? 'w' : '-');

printf("%c ", (mode & S\_IXGRP) ? 'x' : '-');

printf("%c", (mode & S\_IROTH) ? 'r' : '-');

printf("%c", (mode & S\_IWOTH) ? 'w' : '-');

printf("%c\n", (mode & S\_IXOTH) ? 'x' : '-');

}

int main() {

char filename[100];

struct stat file\_stat;

// Get file name from user

printf("Enter the file name: ");

scanf("%s", filename);

// Get file stats

if (stat(filename, &file\_stat) == -1) {

perror("Error fetching file details");

return 1;

}

// Print file permissions

print\_permissions(file\_stat.st\_mode);

// Print file owner and group

struct passwd \*owner = getpwuid(file\_stat.st\_uid);

struct group \*grp = getgrgid(file\_stat.st\_gid);

printf("Owner: %s\n", owner ? owner->pw\_name : "Unknown");

printf("Group: %s\n", grp ? grp->gr\_name : "Unknown");

return 0;

}

OUTPUT:

