#include<iostream>

#include<sys/stat.h>

using namespace std;

int main()

{

int ch;

char input;

char fname[255];

cout<<"Enter absolute path for your file: "; //eg: /home/student/g1q4.cpp

cin>>fname;

struct stat var; //a variable that can store the stat information if the file we provide.

int ret=stat(fname,&var); //call the fuction stat for file name â€˜fnameâ€™ and store the values in â€˜varâ€™.

if(ret<0)

{

cout<<"System call stat exited with an error code "<<ret<<endl;

}

else

{

do{

cout<<"Enter your choice"<<endl;

cout<<"1.Device id\n2.Inode number\n3.Mode\n4.UID\n5.GID\n6.size"<<endl;

cin>>ch;

switch(ch){

case 1:

cout<<"Device id: "<<var.st\_dev<<endl;

break;

case 2:

cout<<"Inode number: "<<var.st\_ino<<endl;

break;

case 3:

cout<<"Mode: "<<var.st\_mode<<endl;

break;

case 4:

cout<<"UID: "<<var.st\_uid<<endl;

break;

case 5:

cout<<"GID: "<<var.st\_gid<<endl;

break;

case 6:

cout<<"Size:"<<var.st\_size<<endl;

break;

}

cout<<"do you want to continue y/n"<<endl;

cin>>input;

}while(input!='n');

}

//you can get this structure by $man fstat (trick, not to be used in exams)

struct stat

{

dev\_t st\_dev; /\* ID of device containing file \*/

ino\_t st\_ino; /\* inode number \*/

mode\_t st\_mode; /\* protection \*/

nlink\_t st\_nlink; /\* number of hard links \*/

uid\_t st\_uid; /\* user ID of owner \*/

gid\_t st\_gid; /\* group ID of owner \*/

off\_t st\_size; /\* total size, in bytes \*/

blksize\_t st\_blksize; /\* blocksize for filesystem I/O \*/

blkcnt\_t st\_blocks; /\* number of 512B blocks allocated \*/

};

}

OUTPUT

[root@localhost inode]# g++ inode1.cpp

[root@localhost inode]# ./a.out

Enter absolute path for your file: /root/inode/inode1.cpp

Enter your choice

1.Device id

2.Inode number

3.Mode

4.UID

5.GID

6.size

1

Device id: 2053

do you want to continue y/n

y

Enter your choice

1.Device id

2.Inode number

3.Mode

4.UID

5.GID

6.size

2

Inode number: 134967

do you want to continue y/n

y

Enter your choice

1.Device id

2.Inode number

3.Mode

4.UID

5.GID

6.size

3

Mode: 33270

do you want to continue y/n

y

Enter your choice

1.Device id

2.Inode number

3.Mode

4.UID

5.GID

6.size

4

UID: 0

do you want to continue y/n

y

Enter your choice

1.Device id

2.Inode number

3.Mode

4.UID

5.GID

6.size

5

GID: 0

do you want to continue y/n

y

Enter your choice

1.Device id

2.Inode number

3.Mode

4.UID

5.GID

6.size

6

Size:1610

do you want to continue y/n

n

[root@localhost inode]#