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思考与练习5

21

#include<stdio.h>

#define TotalStuNumber 30

struct strStudent {

long int lNum;

char strName[20];

float fScore[3];

float fAver;

};

void inData(struct strStudent stu[]){

short int i;

printf("请依次输入学生学号、姓名和三科成绩：\n");

for(i=0;i<TotalStuNumber;i++){

scanf("%d%s%f%f",&stu[i].lNum,&stu[i].strName,&stu[i].fScore[0],&stu[i].fScore[1],&stu[i].fScore[2]);

stu[i].fAver = (stu[i].fScore[0]+stu[i].fScore[1]+stu[i].fScore[2])/3;

}

return ;

}

struct strStudent \*HighScore(struct strStudent stu[]){

short int i;

short int nWho = 0;

for(i=0;i<TotalStuNumber;i++)

if(stu[i].fAver>stu[nWho].fAver)

nWho = i;

return stu + nWho;

}

strStudent \*HighScore(strStudent stu[], FILE \*fp){

short int i;

short int nWho = 0;

for(i = 0; i < TotalStuNumber; i++){

fread(stu + i, sizeof(strStudent), 1, fp);

}

fclose(fp);

for(i = 0; i < TotalStuNumber; i++){

if(stu[i].fAver > stu[nWho].fAver)

nWho = i;

}

return stu + nWho;

}

void outData(struct strStudent \*pstu){

printf("成绩最高的学生：\n");

printf("学号:%ld\n姓名:%s\n",pstu->lNum ,pstu->strName );

printf("成绩:%5.1f,%5.1f,%5.1f\n平均成绩:%6.2f\n",

pstu->fScore[0],pstu->fScore[1],pstu->fScore[2],pstu->fAver );

return;

}

void WriteFile(FILE \*fp, strStudent stu[]){//存入磁盘

if(!(fp = fopen("student.dat", "wb"))){

printf("Can't open the file!\n");

return;

}

for(int i = 0; i < TotalStuNumber; i++){

fwrite(stu + i, sizeof(strStudent), 1, fp);

}

fclose(fp);

return;

}

int main(){

strStudent stu[TotalStuNumber];

strStudent \*ps = stu;

FILE \*fp;

inData(ps);

WriteFile(fp, stu);//文件写入//

if(!(fp = fopen("student.dat", "rb"))){

printf("Can't open the file!\n");

return 1;

}

outData(HighScore(ps, fp));//数据输出

return 0;

}

22题

1. 未定义变量j
2. 指针pb没有正确申请空间
3. 引用数组元素错误\*\*（pb+i）+j改成(\*（\*（pb+i）+j）)

正确的代码如下：

**#include<stdio.h>**

**#include<stdlib.h>**

**#define M 8**

**#define N 10**

**int main()**

**{**

**double \*\*pb;**

**pb = (double \*\*)malloc(M \* sizeof(double \*));**

**int i, j;**

**for(i = 0; i < M; i++){**

**\*(pb + i) = (double \*)malloc(N \* sizeof(double));**

**for(j = 0; j < N; j++){**

**(\*(\*(pb + i)+j)) = i \* N + j;**

**}**

**}**

**for(i = 0; i < M; i++){**

**for(j = 0; j < N; j++){**

**printf("%6.1lf", pb[i][j]);**

**}**

**putchar('\n');**

**}**

**free(pb);**

**return 0;**

**}**