文件操作读写

1.文件读写 fgets fputs

```c
#include<stdio.h>
#include<stdlib.h>

int main() {
    char file_name[20] = "../a.txt";
    FILE *fpw = fopen(file_name, "w");

    char str[100] = "abcdefghigklmnopqrstuvwxyz";
    if (NULL == fpw) {
        printf("打开失败\n");
        exit(0);
    }

    fputs(str,fpw);

    fclose(fpw);


    FILE *fpr = fopen(file_name,"r");
    char res[100];

    fgets(res,5,fpr);
    printf("%s",res);
    fclose(fpr);

    return 0;
}
```

控制台输出：

```
abcd
```

文件内容：

```
abcdefghigklmnopqrstuvwxyz
```

2.文件读写 fscanf fprintf

```c
#include <stdio.h>
#include <stdlib.h>


typedef struct student{

    int id;
    float score;
    char b[100];

} student;

#define N 5

int main() {

    FILE *fpw = fopen("../a.txt","w");

    student student1[N] = {
            {1,120.5f,"djfgfgffflkfjfj"},
            {2,125.5f,"15655"},
            {3,130.5f,"4525252"},
            {4,140.5f,"djfffl525252525kfjfj"},
            {5,145.5f,"sddddd"}
    };

    for (int i = 0; i < N; ++i) {
        fprintf(fpw,"%d %f %s\n",student1[i].id,student1[i].score,student1[i].b);
    }

    fclose(fpw);

    student s[5];

    FILE *fpr = fopen("../a.txt","r");
    if(fpr!=NULL){
        for (int i = 0; i < N; ++i) {
            fscanf(fpr,"%d %f %s",&s[i].id,&s[i].score,s[i].b);
        }
        fclose(fpr);

        for (int i = 0; i < N; ++i) {
            printf("%d %f %s\n",s[i].id,s[i].score,s[i].b);
        }
    } else{
        printf("打开失败");
    }

    return 0;
}
```

控制台输出：

```
1 120.500000 djfgfgffflkfjfj
2 125.500000 15655
3 130.500000 4525252
4 140.500000 djfff1525252525kfjfj
5 145.500000 sddddd
```

a.txt 文件内容：

```
1 120.500000 djfgfgffflkfjfj
2 125.500000 15655
3 130.500000 4525252
4 140.500000 djfff1525252525kfjfj
5 145.500000 sddddd
```

3.文件读写 fwrite fread

```
#include <stdio.h>



typedef struct student{
    int id;
    float score;
    char str[20];
}student;

int main() {

    student s[5] = {
            {1,150.0f,"dhfgfgf"},
            {2,124.0f,"55555f7fdf82"},
            {3,150.0f,"fdjhgdgkd"},
            {4,130.0f,"fdgkhhdfkd878"},
            {5,115.0f,"58855dkmgjkdk"}
    };

    FILE *fpw;

    fpw = fopen("../a.txt","wb");

    if(fpw!=NULL){
        for (int i = 0; i < 5; ++i) {
            fwrite(&s[i],sizeof(student),1,fpw);    // 缓冲区 每个大小按字节计算 多少个  文件指针
        }
    }
    fclose(fpw);
```

```
    student res[5];

    FILE *fpr;
    fpr = fopen("../a.txt","rb");
    if(fpr!=NULL){
        for (int i = 0; i < 5; ++i) {
            fread(&res[i],sizeof(student),1,fpr);
        }
    }

    for (int i = 0; i < 5; ++i) {
        printf("%d %f %s\n",res[i].id,res[i].score,res[i].str);
    }
    fclose(fpr);
    return 0;
}
```

控制台输出：

```
1 150.000000 dhfgfgf
2 124.000000 55555f7fdf82
3 150.000000 fdjhgdgkd
4 130.000000 fdgkhhdfkd878
5 115.000000 58855dkmgjkdk
```

a.txt 文件内容：

```
□      □Cdhfgfgf              □      鳥55555f7fdf82         □      □Cfdjhgdgkd
□      □Cfdgkhhdfkd878        □      鏘58855dkmgjkdk
```