#第15周-17377191-段秋阳

# 1. P391, 5 (建议逐个字符读)

```
//P391 5
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
int main()
    FILE *fp = NULL;
    fp = fopen("1.txt", "r");
    char line[100];
    const char sep[] = ",";
    for (int i = 0; i < 4; i++)
    {
        fgets(line, sizeof(line), fp);
        printf("Name: %s\n", strtok(line, sep));
        printf("Address: %s\n", strtok(NULL, sep));
        printf("City, State: %s\n", strtok(NULL, "\n"));
        printf("\n");
    }
    system("pause");
    return fclose(fp);
}
```

```
//P392,6
#include <stdio.h>
#include <stdlib.h>
typedef struct
    char name[20];
    char id[20];
    double perHour;
    int time;
    double total;
} Info;
int main()
{
    FILE *fp;
    fp = fopen("2.txt", "r");
    Info info[4];
    for (int i = 0; i < 4; i++)
        char line[100];
        fgets(line, sizeof(line), fp);
        sscanf(line, "%s %s %lf %d", info[i].name, info[i].id,
&info[i].perHour, &info[i].time);
        info[i].total = info[i].perHour * info[i].time;
    }
    printf("name\t\tid\t\ttotal\n");
    for (int i = 0; i < 4; i++)
        printf("%s\t%s\t%lf\n", info[i].name, info[i].id, info[i].total);
    system("pause");
    return fclose(fp);
}
```

# 3. P395, 3

```
//P395,3
#include <stdio.h>
#include <stdlib.h>
int main()
{
    FILE *fp;
    char c;
    fp = fopen("text.dat", "r");
    while ((c = fgetc(fp)) != EOF)
        putchar(c);
    printf("\n");
    rewind(fp);
    while ((c = fgetc(fp)) != EOF)
    {
        putchar(c);
        fseek(fp, 1L, SEEK_CUR);
    }
    printf("\n");
    system("pause");
    return 0;
}
```

### 4. P407, 4

```
//P407,4
#include <stdio.h>
#include <stdlib.h>
int main()
{
    char fileName[] = "Pollen.dat";
    int cnt, counts[10], total = 0;
    double oldAvg, newAvg;
    FILE *fp;
    printf("Plz enter a new pollen count: ");
    scanf("%d", &cnt);
    fp = fopen(fileName, "r");
    for (int i = 0; i < 10; i++)
    {
        fscanf(fp, "%d", &counts[i]);
        total += counts[i];
    }
    fclose(fp);
    oldAvg = total / 10;
    total = total - counts[0] + cnt;
    newAvg = total / 10;
    for (int i = 0; i < 9; i++)
        counts[i] = counts[i + 1];
    counts[9] = cnt;
    fp = fopen(fileName, "w");
```

```
I d\lovestudy\studybetter\C-language\C-Programming\Week15\d.c.exe — X
P1z enter a new pollen count: 180
Old average value: 103.000000\New average value: 118.000000\integrate 接继续. . .
```

5. 实现程序将文本文件倒序输出到新的文件。

```
//reverse text
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
int main()
{
    FILE *inFile, *outFile;
    char oriTxt[100], revTxt[100], ch;
    long offset = 0;
    inFile = fopen("5.txt", "r");
    fgets(oriTxt, sizeof(oriTxt), inFile);
    puts(oriTxt);
    for (int i = strlen(oriTxt) - 1; i >= 0; i--)
        revTxt[strlen(oriTxt) - 1 - i] = oriTxt[i];
    puts(revTxt);
    outFile = fopen("rev.txt", "w");
```

```
fputs(revTxt, outFile);

fclose(inFile);
fclose(outFile);

system("pause");
return 0;
}
```

```
■ d\lovestudy\studybetter\C-language\C-Programming\Week15\5.c.exe

Hicrosoft has released Windows Subsystem for Linux 2.0
0.2 xuniL rof metsysbuS swodni♥ desaeler sah tfosorciM@
请按任意键继续. . . _
```

# 6. 《现代方法第2版》P416, 3

```
//《现代方法》P416,3
#include <stdio.h>
#include <stdlib.h>
int main(int argc, char *argv[])
    FILE *fp;
    char ch;
    int flag = 0;
    for (int i = 0; i < argc; i++)
    {
        fp = fopen(argv[i], "r");
        if (fp)
        {
            flag = 1;
            while ((ch = fgetc(fp)) != EOF)
                putchar(ch);
        }
    }
```

```
printf("\n");
if (flag)
{
    printf("Success!\n");
    return EXIT_SUCCESS;
}
else
{
    printf("No file opened!\n");
    return EXIT_FAILURE;
}
```

### 7.《现代方法第2版》P418, 17

```
//《现代方法》P418,17
#include <stdio.h>
#include <stdlib.h>
#include <ctype.h>
#include <string.h>
int main(int argc, char *argv□)
{
    FILE *fp;
    char line[20], tel[20], top;
    if (argc)
    {
        fp = fopen(argv[1], "r");
        while (!feof(fp))
            // memset(tel, 0, 20);
            fgets(line, sizeof(line), fp);
            top = -1;
            for (int i = 0; i < strlen(line); i++)
            {
                // if ('0' < line[i] < '9' || line[i] == '0' || line[i] ==
191)
                if (isdigit(line[i]))
                    tel[++top] = line[i];
```

```
D:\lovestudy\studybetter\C-language\C-Programming\Week15>g++ 7.c -o 7.exe

D:\lovestudy\studybetter\C-language\C-Programming\Week15>7.exe 7.txt
(404) 817-6900
(215) 686-1776
(312) 746-6000
(877) 275-5273
(617) 343-4200
请按任意键继续...
```

### 8.《现代方法第2版》 P416, 6

```
//《现代方法》P416,6
#include <stdio.h>
#include <stdlib.h>
#include <ctype.h>
#include <string.h>
#define LEN 10
int min(int, int);
int main(int argc, char *argv□)
{
    FILE *fp;
    long cur = 0L;
    char buf[LEN];
    if (argc != 2)
        printf("Missing file name!\n");
        exit(EXIT_FAILURE);
    }
    fp = fopen(argv[1], "rb");
    printf("Offset
                                      Bytes
```

```
Characters\n");
    printf("-----
-\n");
    while (!feof(fp))
    {
        cur = ftell(fp);
        printf("%d\t", cur);
        int n = fread(buf, sizeof(char), LEN, fp);
        if (n <= LEN)
        {
            for (int i = 0; i < min(LEN, n); i++)
                printf("%02X ", buf[i]);
            printf("\t\t\t");
            for (int i = 0; i < min(LEN, n); i++)
                if (isprint(buf[i]))
                    putchar(buf[i]);
                else
                     putchar('.');
            printf("\n");
        }
    }
    system("pause");
    return fclose(fp);
}
int min(int a, int b)
{
    return (a < b)? a : b;
}
```

```
D:\lovestudy\studybetter\C-language\C-Programming\Week15>g++ 8.c -o 8.exe
D:\lovestudy\studybetter\C-language\C-Programming\Week15>8.exe pun.c
Offset
                         Bytes
                                                       Characters
        23 69 6E 63 6C 75 64 65 20 3C
0
                                                         #include <</pre>
10
        73 74 64 69 6F 2E 68 3E 0D 0A
                                                         stdio.h>...
20
        0D 0A 69 6E 74 20 6D 61 69 6E
                                                         ..int main
30
        28 76 6F 69 64 29 0D 0A 7B 0D
                                                         (void)..{.
40
        0A 20 20 20 20 70 72 69 6E 74
                                                              print
50
        66 28 22 54 6F 20 43 2C 20 6F
                                                         f("To C, o
        72 20 6E 6F 74 20 74 6F 20 43
                                                         r not to C
60
        3A 20 74 68 61 74 20 69 73 20
70
                                                         : that is
80
        74 68 65 20 71 75 65 73 74 69
                                                         the questi
90
        6F 6E 2E 5C 6E 22 29 3B 0D 0A
                                                         on.\n");...
100
        20 20 20 20 72 65 74 75 72 6E
                                                              return
        20 30 3B 0D 0A 7D 0D 0A
110
                                                          0;..}..
请按任意键继续...
```