

程序设计基础实验

The Basic Experiments of Programming Design

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Outlines



一、代码走查学习

二、"简易计算器"功能 拆解分析

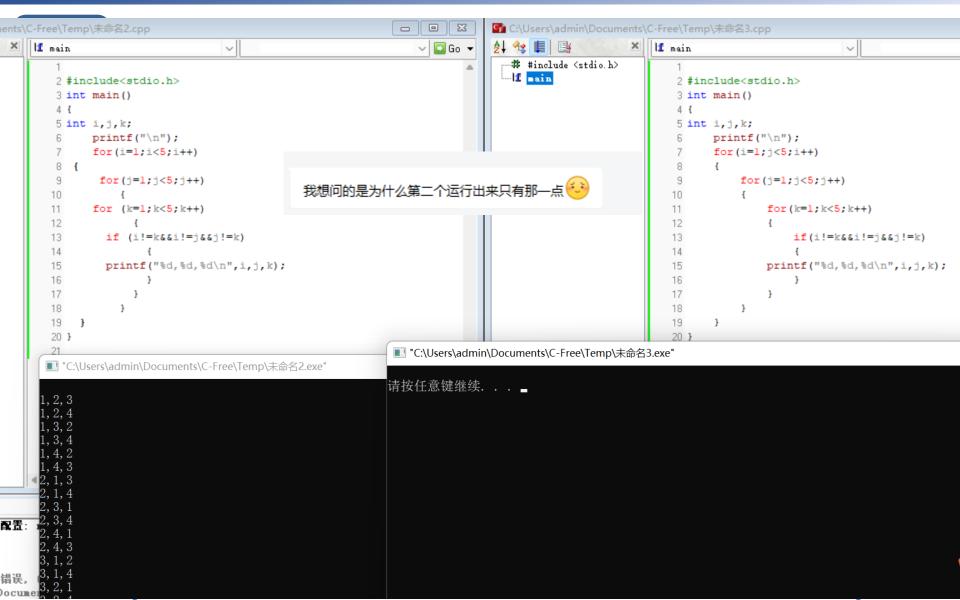




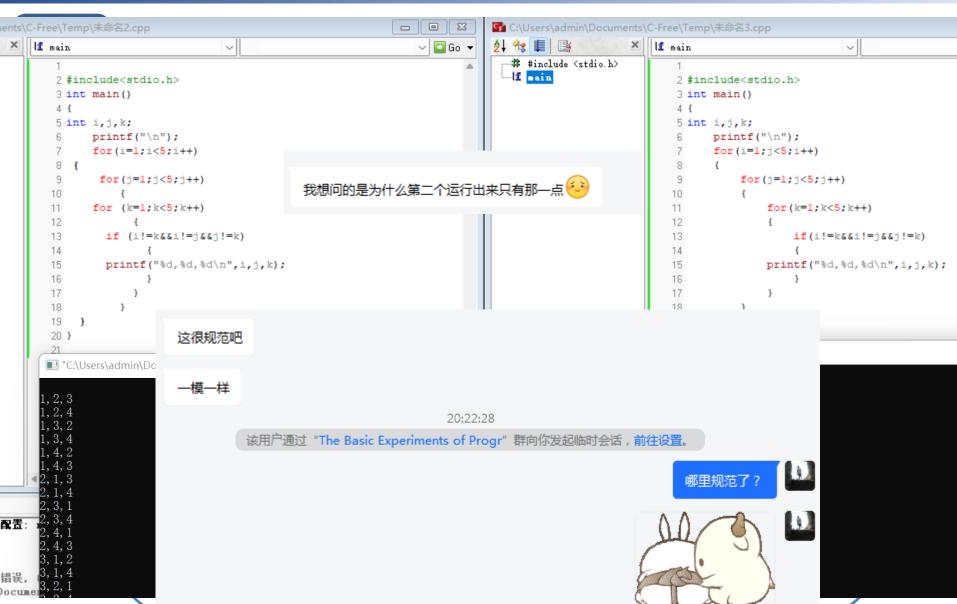
原本是一个阳光明媚的下午



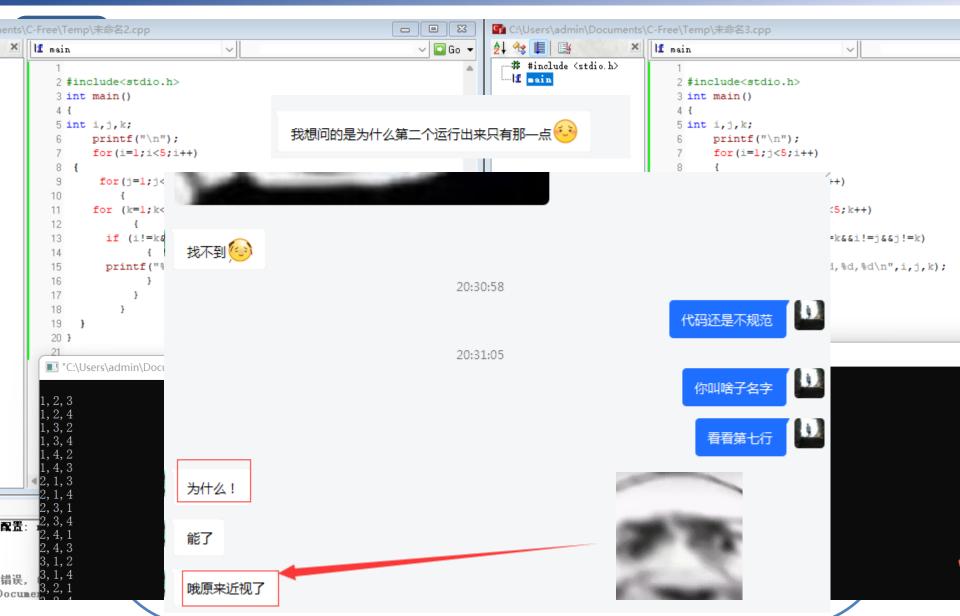






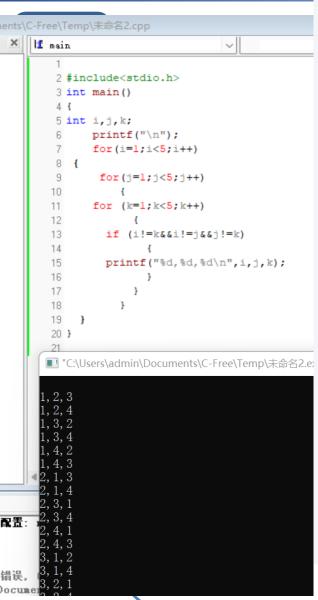


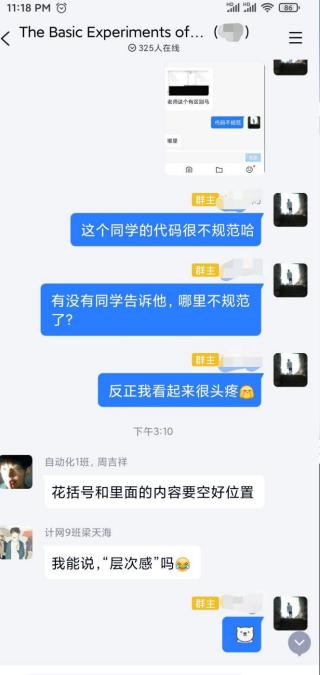






代码走到





```
C-Free\Temp\未命名3.cpp
                                  \sim
 If main
     2 #include<stdio.h>
     3 int main()
     4 {
     5 int i,j,k;
           printf("\n");
           for (i=1; j<5; i++)
     9
                for(j=1;j<5;j++)
    10
    11
                     for (k=1; k<5; k++)
    12
    13
                         if (i!=k&&i!=j&&j!=k)
    14
                     printf("%d,%d,%d\n",i,j,k);
    16
    17
    18
    19
    20 }
3.exe"
```



Outlines



一、代码走查学习

二、"简易计算器"功能 拆解分析



实验4:"简易计算器"(背景&拆解



编程实现包含加减乘除运算的无优先级表达式的值,测试用例如下: 样例:一个字符串"1-2.5*4+10.2/5.1",运算步骤为 2.5*4=>10,

10.2/5.1=>2, 1-10=>-9, -9+2=>-7.

生活中亦是如此,倘若遇见一个较大的困难,一时不知所措,也要明白再大的问题也是由一个个小问题组成的,我们要学会拆解困难,一步一个脚印!





```
1 #include<stdio.h>
2
3 int main()
4 {
5     char strExp[]="3+4";
6     //Your task is to print the result of strExp
7
8     return 0;
9 }
```





```
#include<stdio.h>
   #include<string.h>
 3
    int main()
        char strExp[]="3+4";
        //Your task is to print the result of strExp
 8
        int leftOperand = strExp[0] - '0';
10
         int rightOperand = strExp[2] - '0';
11
         int res = leftOperand + rightOperand;
12
        printf("res = %d\n",res);
13
14
        return 0;
15
```





```
#include<stdio.h>

int main()

{
    char strExp[]="1+2+2+1+2+5+4-1-3+4-8";

    //Your task is to print the result of strExp

return 0;

}
```





```
#include<stdio.h>
    #include<string.h>
    int main()
         char strExp[]="1+2+2+1+2+5+4-1-3+4-8";
         int res=strExp[0]-'0';
         for(int i=1;i<strlen(strExp);i++)</pre>
10▼
11
             if(strExp[i]=='+')
12▼
13
                 int rightOperand=strExp[i+1]-'0';
                 res=res+rightOperand;
15
                 i++;
17
             else if(strExp[i]=='-')
18▼
                 int rightOperand=strExp[i+1]-'0';
                 res=res-rightOperand;
21
                 i++;
22
23
         printf("res = %d",res);
25
         return 0;
```





```
1 #include<stdio.h>
2
3 int main()
4 {
5     char strExp[]="2*2/4*1/1*2*3/2";
6     //Your task is to print the result of strExp
7
8     return 0;
9 }
```





```
#include<stdio.h>
     #include<string.h>
     int main()
         char strExp[]="2*2/4*1/1*2*3/2";
         int res=strExp[0]-'0';
         for(int i=1;i<strlen(strExp);i++)</pre>
10 ▼
11
             if(strExp[i]=='*')
12▼
13
                 int rightOperand=strExp[i+1]-'0';
                 res=res*rightOperand;
15
                 i++;
17
             else if(strExp[i]=='/')
18 ▼
19
                 int rightOperand=strExp[i+1]-'0';
                 res=res/rightOperand;
21
                 i++;
22
23
24
         printf("res = %d",res);
25
         return 0;
```





```
1 #include<stdio.h>
2
3 int main()
4 {
5     char strExp[]="2+2*3+2/2-1";
6     //Your task is to print the result of strExp
7
8     return 0;
9 }
```



实验ing



同学们编程实现"简易计算器"VO、V1、V2、V3

要求:

- 1. 理解并掌握该"简易计算器"
- 2. 上传代码到代码仓库
- 3. 流程图 + 代码 + 仓库链接



The End



Q&A