

第三次作业-17377191-段秋阳

1.C-alert

```
//alert sound

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

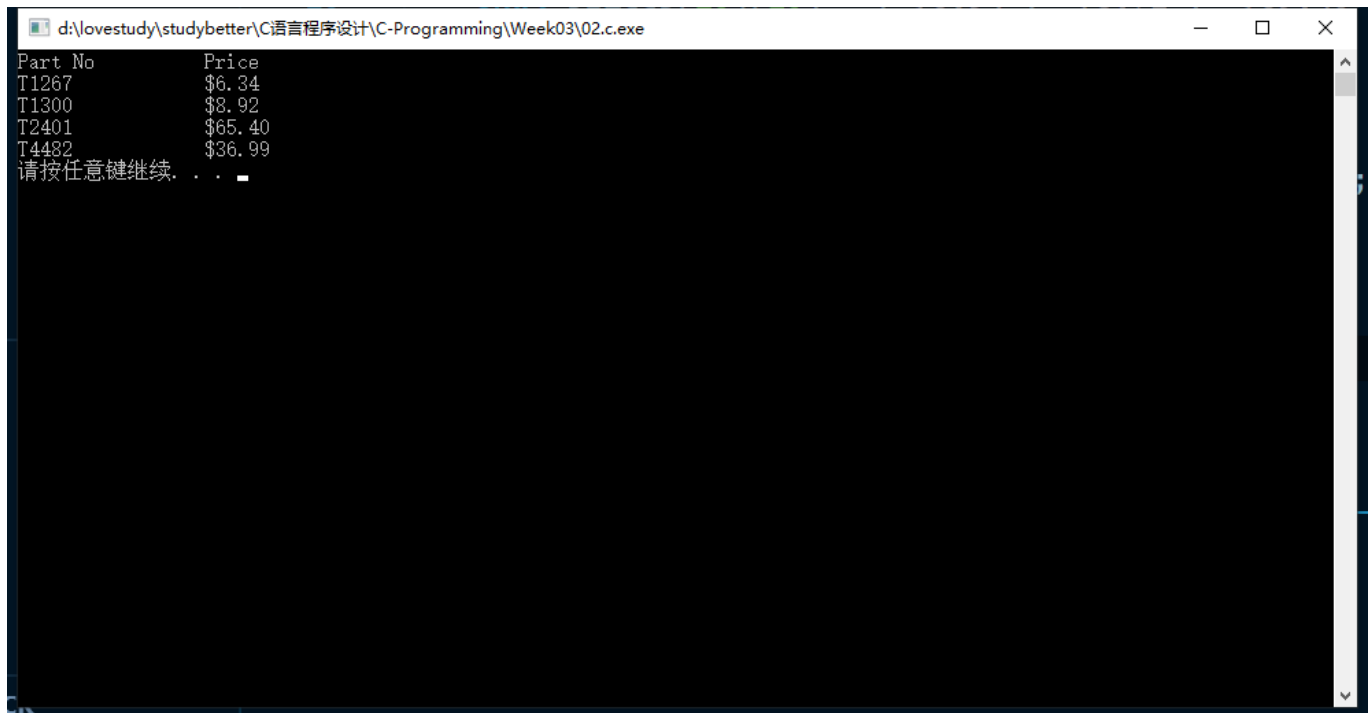
int main()
{
    printf("\a");
    system("pause");
    return 0;
}
```

2.Print Info

```
//P39 2.1:print info

#include <stdio.h>
#include <stdlib.h>
#include <string.h>

int main()
{
    char parts[10][10] = {"T1267", "T1300", "T2401", "T4482"};
    char prices[10][10] = {"$6.34", "$8.92", "$65.40", "$36.99"};
    printf("Part No \t Price \n");
    for (int i = 0; i < 4; i++)
    {
        printf("%s \t\t %s \n", parts[i], prices[i]);
    }
    system("pause");
    return 0;
}
```



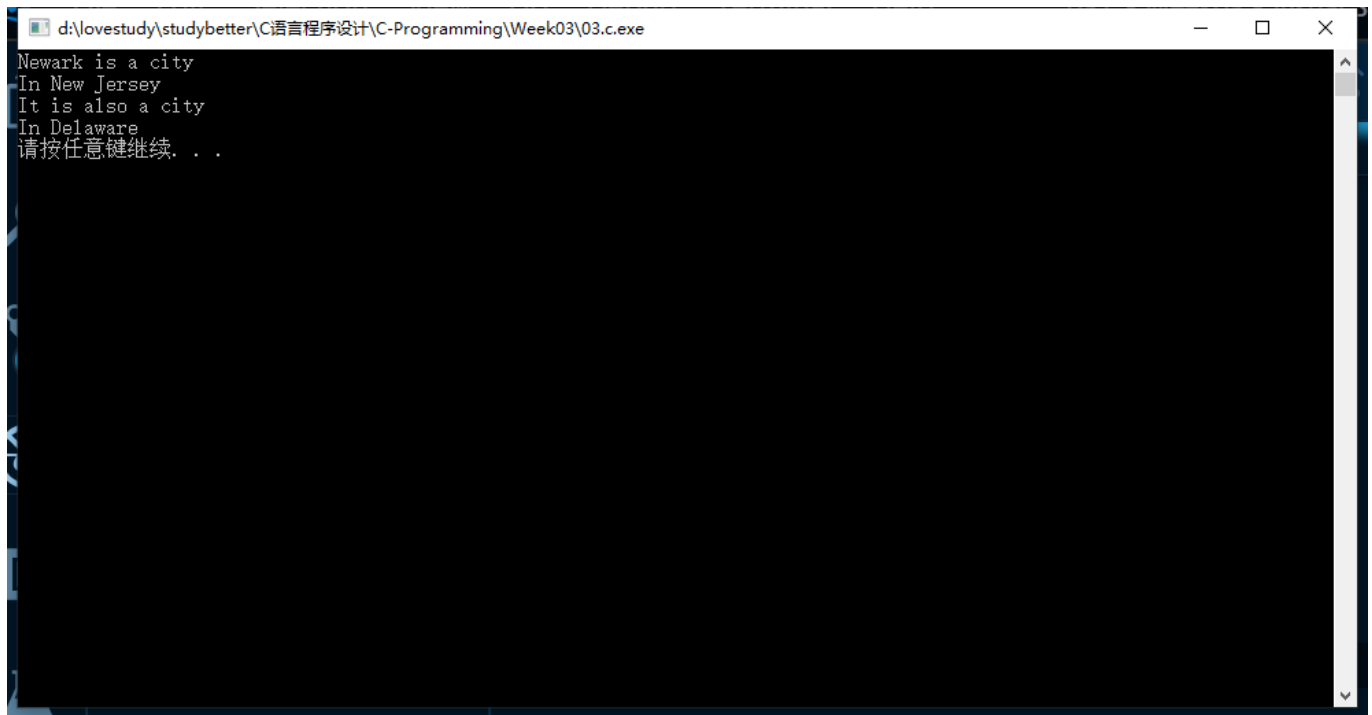
```
d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\02.c.exe
Part No      Price
T1267        $6.34
T1300        $8.92
T2401        $65.40
T4482        $36.99
请按任意键继续. . .
```

3.Prettify The Code

```
//P43 2.2: Q2
#include <stdio.h>
#include <stdlib.h>

int main()
{
    printf("Newark is a city\n");
    printf("In New Jersey\n");
    printf("It is also a city\n");
    printf("In Delaware\n");

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



```
d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\03.c.exe
Newark is a city
In New Jersey
It is also a city
In Delaware
请按任意键继续. . .
```

4.Calculate

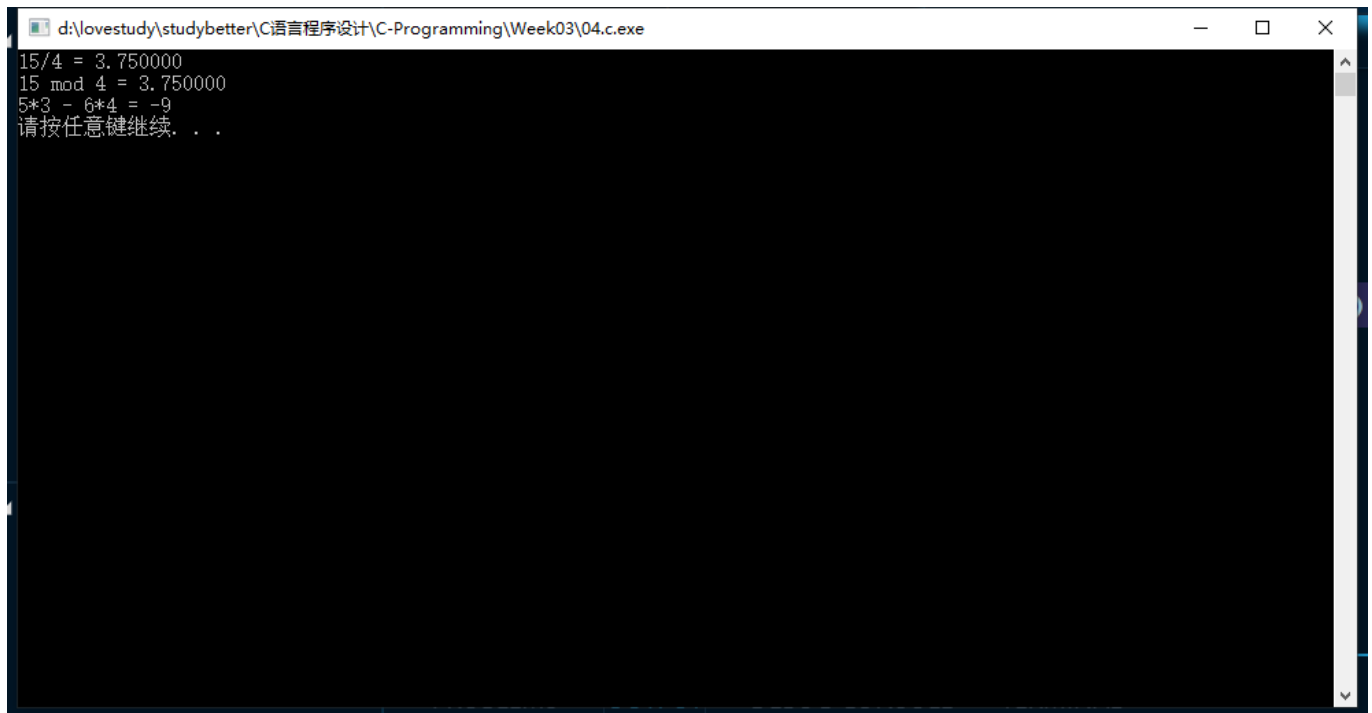
```
//P58 2.4: Q4

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

int main()
{
    printf("15/4 = %f\n", 15.0 / 4.0);
    printf("15 mod 4 = %f\n", 15 % 4);

    printf("5*3 - 6*4 = %d\n", 5 * 3 - 6 * 4);

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

A screenshot of a Windows command prompt window. The title bar shows the file path: d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\04.c.exe. The window has standard Windows window controls (minimize, maximize, close). The output text is as follows:

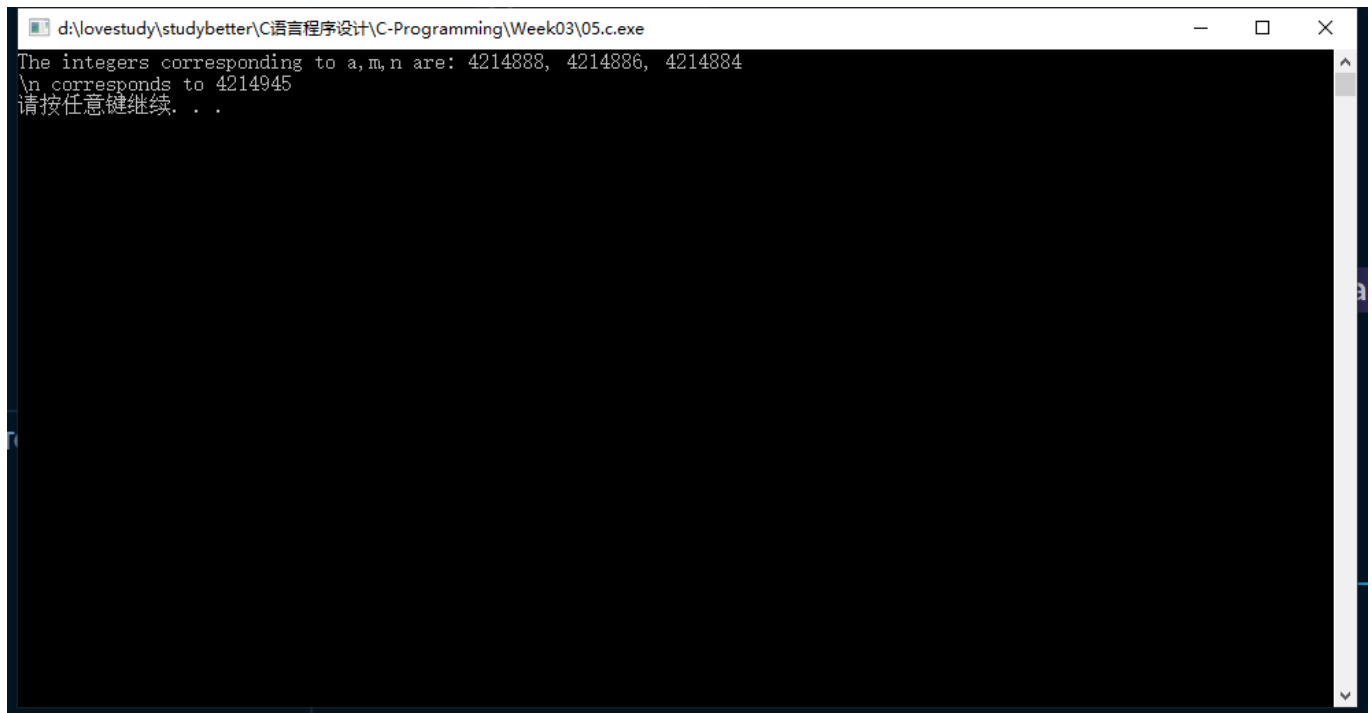
```
15/4 = 3.750000
15 mod 4 = 3.750000
5*3 - 6*4 = -9
请按任意键继续. . .
```

5.Convert letters to numbers

```
//P58 2.4:Q5
#include <stdio.h>
#include <stdlib.h>

int main()
{
    printf("The integers corresponding to a,m,n are: %d, %d, %d\n", "a",
    "m", "n");
    printf("\n corresponds to %d\n", "\n");

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



```
d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\05.c.exe
The integers corresponding to a,m,n are: 4214888, 4214886, 4214884
\n corresponds to 4214945
请按任意键继续. . .
```

6.Caculate the area of a circle

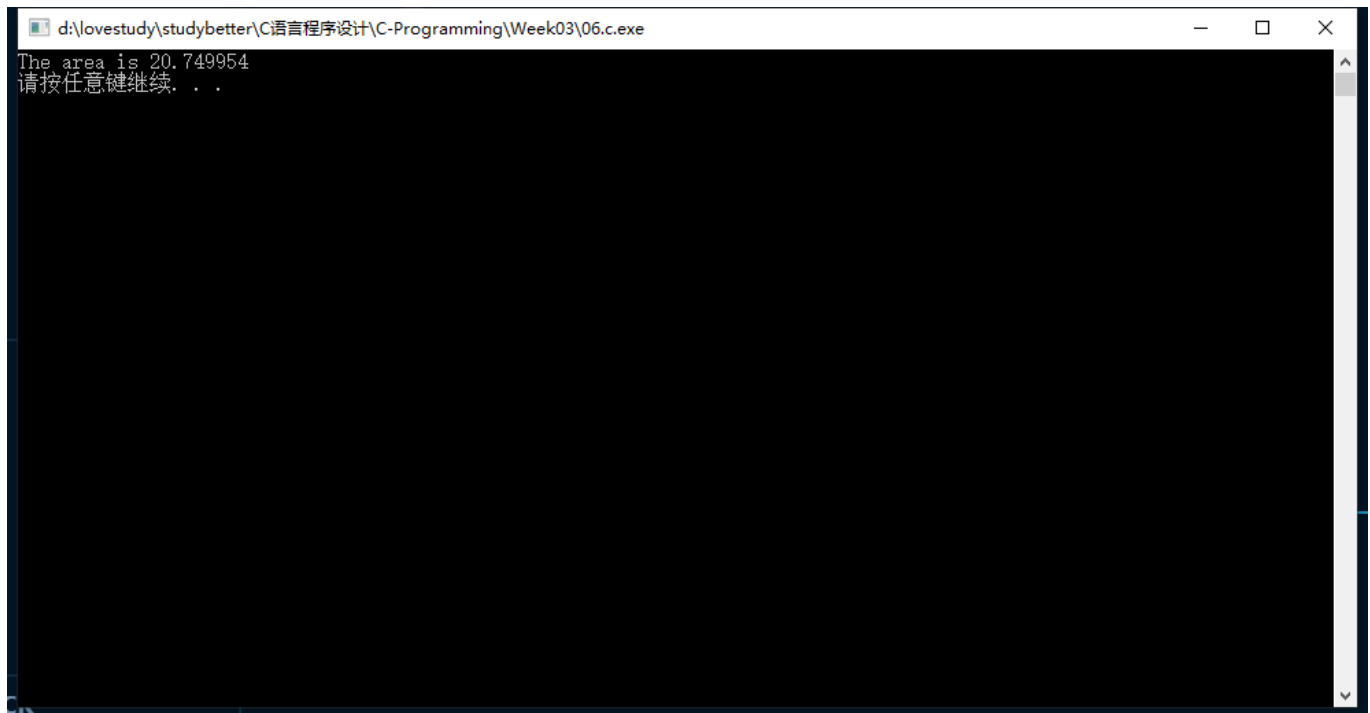
```
//P65 2.5: Q2

#include <stdio.h>
#include <stdlib.h>
#include <math.h>

#define PI 3.1416

int main()
{
    double radius = 2.57;
    double area = PI * radius * radius;
    printf("The area is %f\n", area);

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



```
d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\06.c.exe
The area is 20.749954
请按任意键继续. . .
```

7.Dollars and Cents

```
//P66 2.5: 6(a)

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

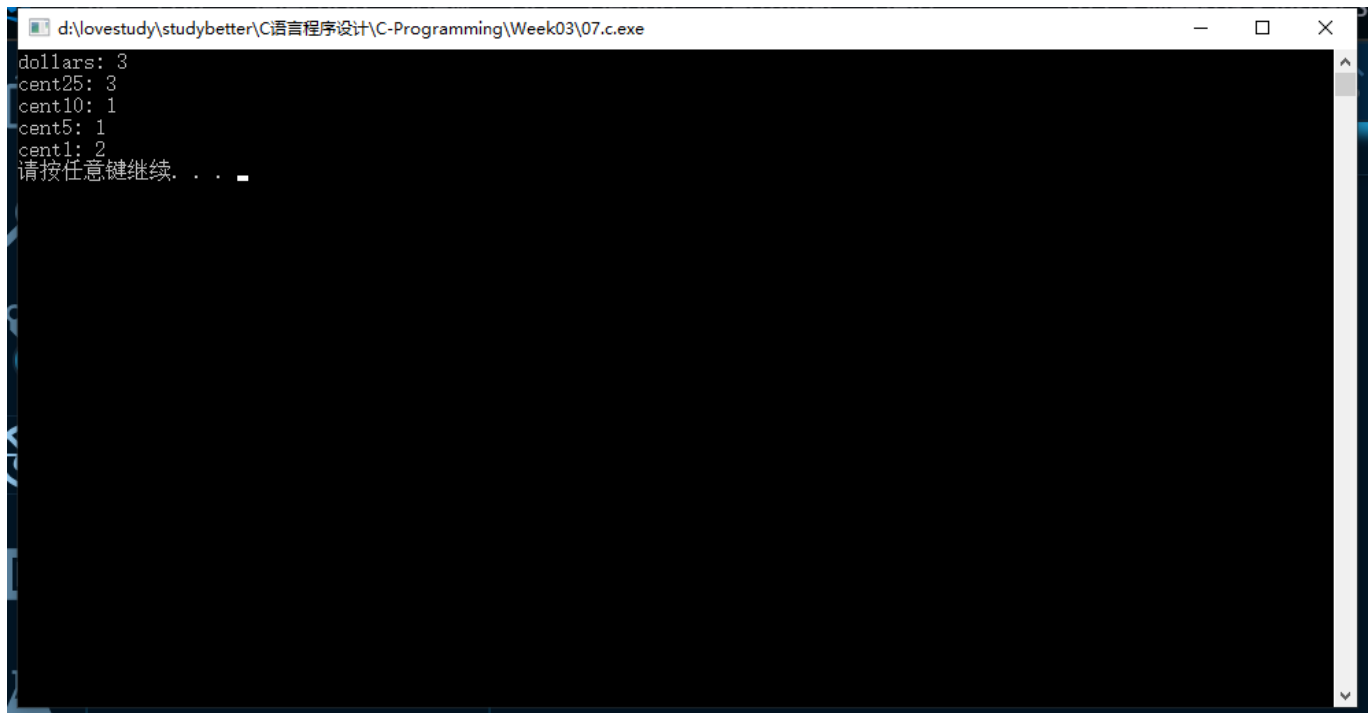
int main()
{
    float paid = 10.00;
    float check = 6.07;

    int change = (paid - check) * 100; //cents
    int dollars = change / 100;        //dollars -> 100cents

    int cent25 = (change - 100 * dollars) / 25;
    int cent10 = (change - 100 * dollars - 25 * cent25) / 10;
    int cent5 = (change - 100 * dollars - 25 * cent25 - 10 * cent10) / 5;
    int cent1 = (change - 100 * dollars - 25 * cent25 - 10 * cent10 - 5 *
cent5);

    printf("dollars: %d\n", dollars);
    printf("cent25: %d\n", cent25);
    printf("cent10: %d\n", cent10);
    printf("cent5: %d\n", cent5);
    printf("cent1: %d\n", cent1);

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

A screenshot of a Windows command prompt window titled "d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\07.c.exe". The window has a black background with white text. The text shows the output of a program: "dollars: 3", "cent25: 3", "cent10: 1", "cent5: 1", "cent1: 2", and "请按任意键继续. . .". The cursor is at the end of the last line.

```
d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\07.c.exe
dollars: 3
cent25: 3
cent10: 1
cent5: 1
cent1: 2
请按任意键继续. . .
```

8.Slope

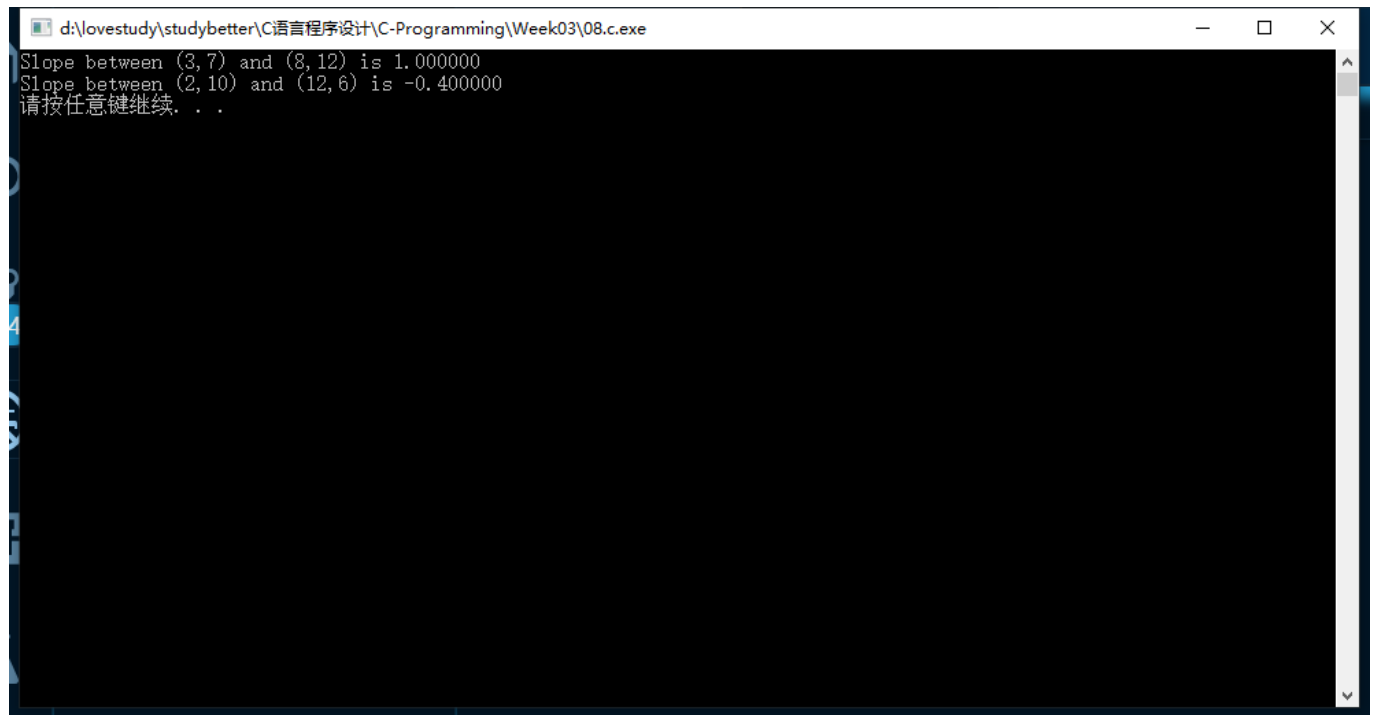
```
//P69 2.6: Q7
#include <stdio.h>
#include <stdlib.h>

float getSlope(float x1, float y1, float x2, float y2)
{
    if (x1 == x2)
        printf("Slope doesn't exist");
    else
        return (y2 - y1) / (x2 - x1);
}

int main()
{
    float x1 = 3.0, y1 = 7.0, x2 = 8.0, y2 = 12.0;
    float slope = getSlope(x1, y1, x2, y2);
    printf("Slope between (3,7) and (8,12) is %f\n", slope);

    x1 = 2.0, y1 = 10.0, x2 = 12.0, y2 = 6.0;
    slope = getSlope(x1, y1, x2, y2);
    printf("Slope between (2,10) and (12,6) is %f\n", slope);

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



The image shows a screenshot of a Windows command prompt window. The title bar at the top reads "d:\lovestudy\studybetter\C语言程序设计\C-Programming\Week03\08.c.exe". The window contains the following text:

```
Slope between (3,7) and (8,12) is 1.000000  
Slope between (2,10) and (12,6) is -0.400000  
请按任意键继续. . .
```

The text is displayed in a monospaced font on a black background. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.