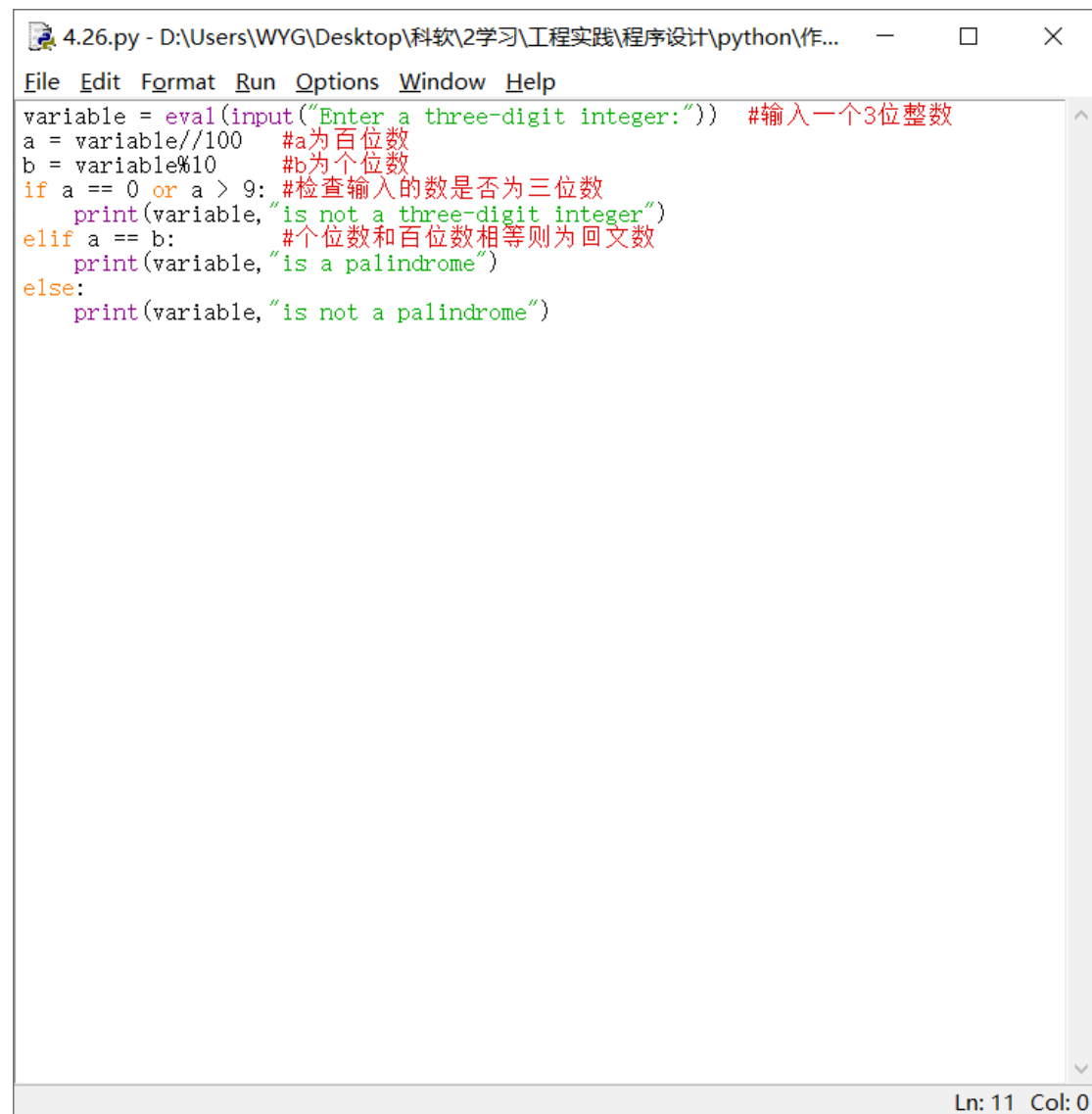


第一题 4.26:

1.程序代码:

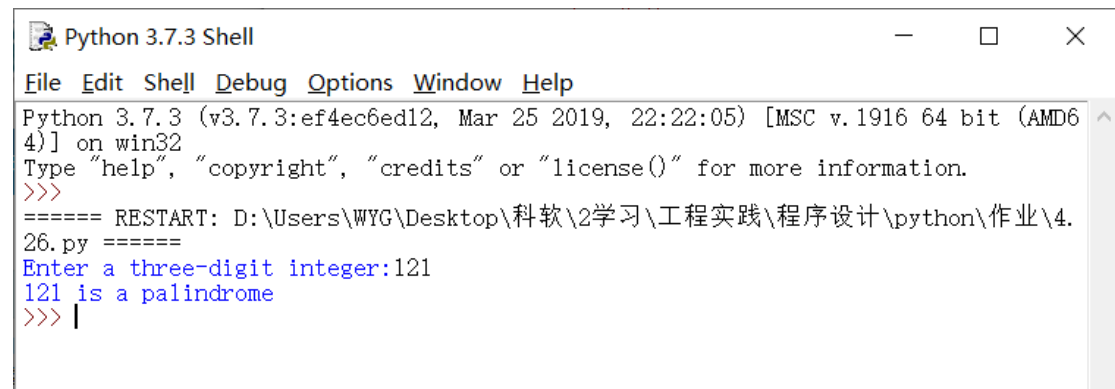


```
4.26.py - D:\Users\WYG\Desktop\科软\2学习\工程实践\程序设计\python\作...  — □ ×
File Edit Format Run Options Window Help
variable = eval(input("Enter a three-digit integer:")) #输入一个3位整数
a = variable//100 #a为百位数
b = variable%10 #b为个位数
if a == 0 or a > 9: #检查输入的数是否为三位数
    print(variable, "is not a three-digit integer")
elif a == b: #个位数和百位数相等则为回文数
    print(variable, "is a palindrome")
else:
    print(variable, "is not a palindrome")

Ln: 11 Col: 0
```

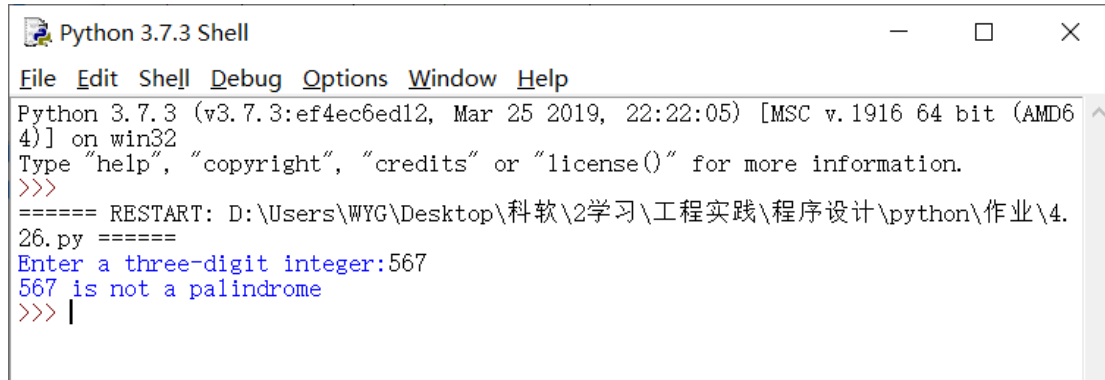
2.运行结果:

输入为回文数



```
Python 3.7.3 Shell — □ ×
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 22:22:05) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\Users\WYG\Desktop\科软\2学习\工程实践\程序设计\python\作业\4.26.py =====
Enter a three-digit integer:121
121 is a palindrome
>>> |
```

输入为非回文数



```
Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 22:22:05) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\Users\WYG\Desktop\科软\2学习\工程实践\程序设计\python\作业\4.26.py =====
Enter a three-digit integer:567
567 is not a palindrome
>>> |
```

输入为非三位数



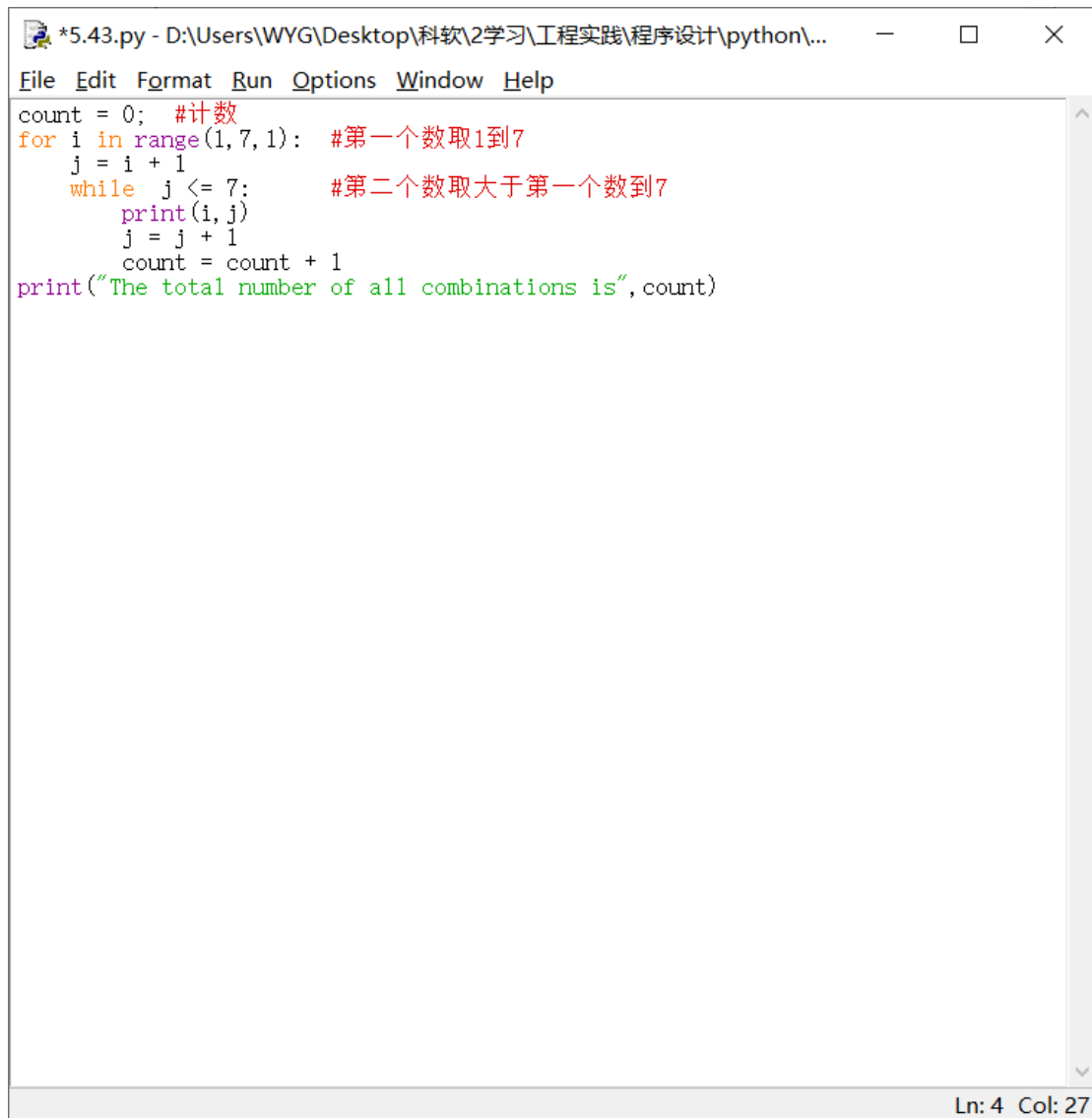
```
Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 22:22:05) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\Users\WYG\Desktop\科软\2学习\工程实践\程序设计\python\作业\4.26.py =====
Enter a three-digit integer:1234
1234 is not a three-digit integer
>>>
```

3.结果分析:

运行结果符合题目要求, 可以判断输入的三位数是否为回文数, 以及输入的数是否为三位数。

第二题 5.43:

1.程序代码:

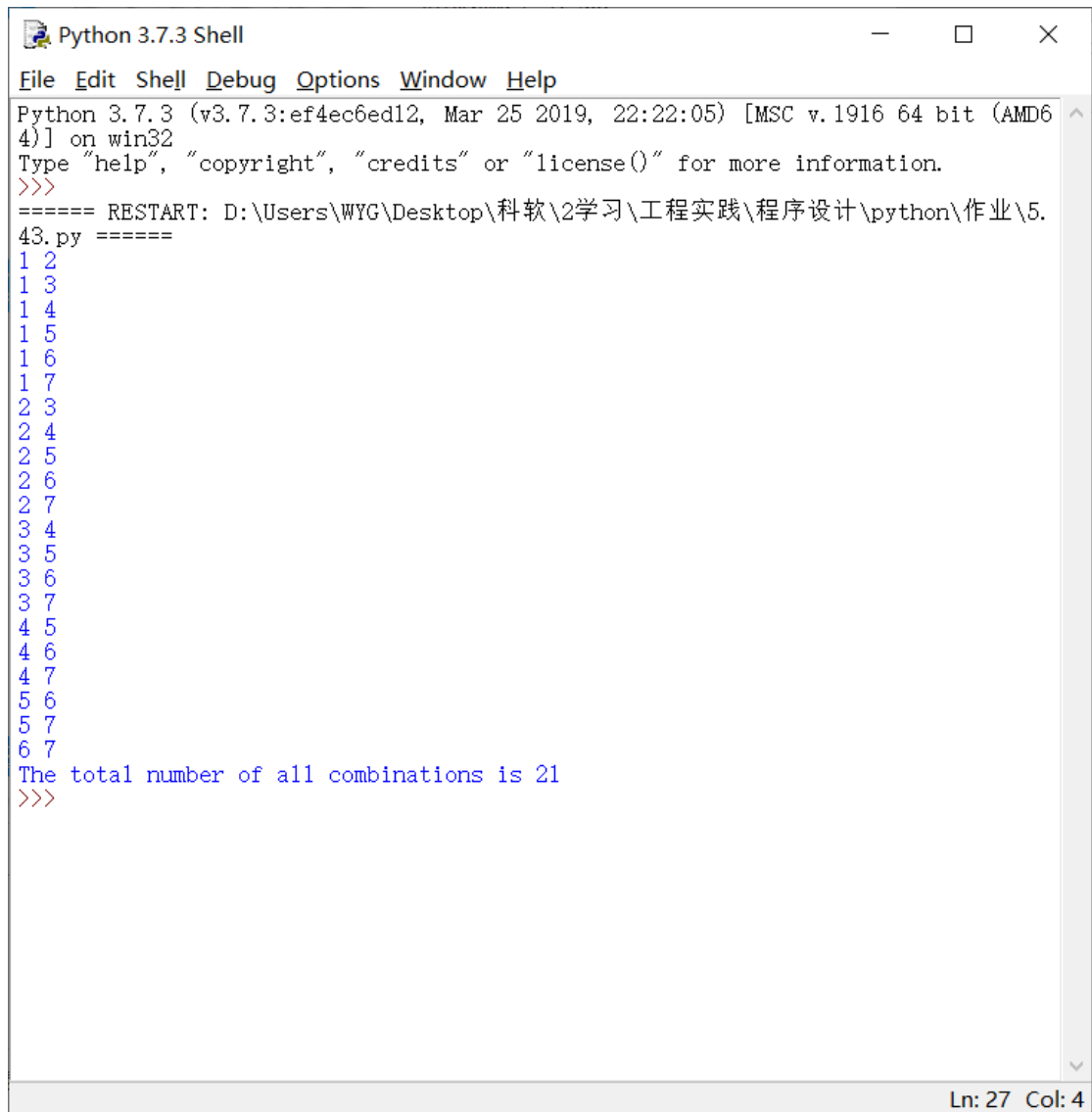


A screenshot of a Python IDE window titled '*5.43.py - D:\Users\WYG\Desktop\科软\2学习\工程实践\程序设计\python\...'. The window contains a Python script with the following code:

```
count = 0; #计数
for i in range(1, 7, 1): #第一个数取1到7
    j = i + 1
    while j <= 7: #第二个数取大于第一个数到7
        print(i, j)
        j = j + 1
    count = count + 1
print("The total number of all combinations is", count)
```

The status bar at the bottom right indicates 'Ln: 4 Col: 27'.

2.运行结果:



```
Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 22:22:05) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\Users\WYG\Desktop\科软\2学习\工程实践\程序设计\python\作业\5.
43.py =====
1 2
1 3
1 4
1 5
1 6
1 7
2 3
2 4
2 5
2 6
2 7
3 4
3 5
3 6
3 7
4 5
4 6
4 7
5 6
5 7
6 7
The total number of all combinations is 21
>>>
```

Ln: 27 Col: 4

3.结果分析:

运行结果符合题目要求，这样的排列一共有 21 种，如上图所示。