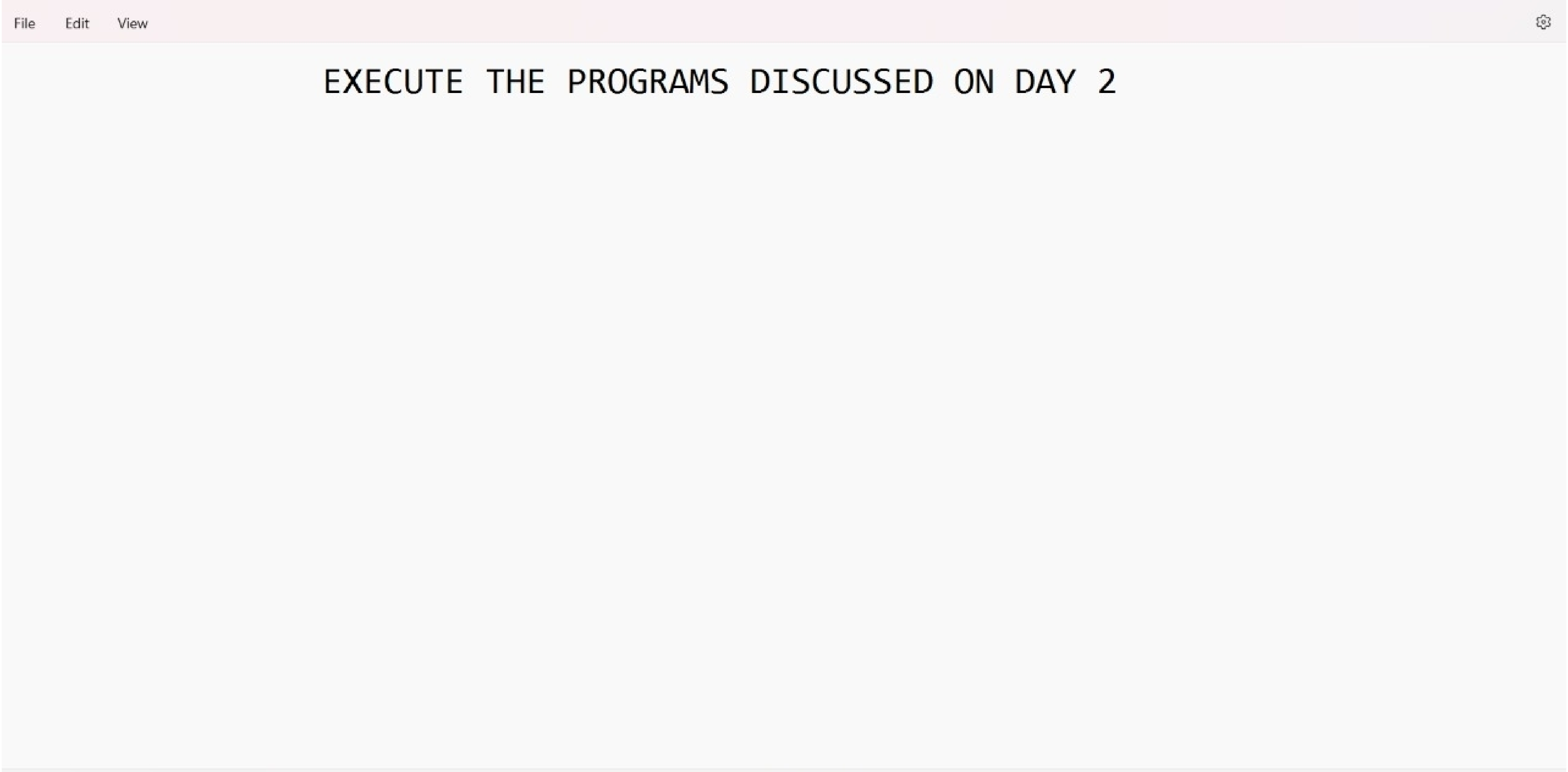
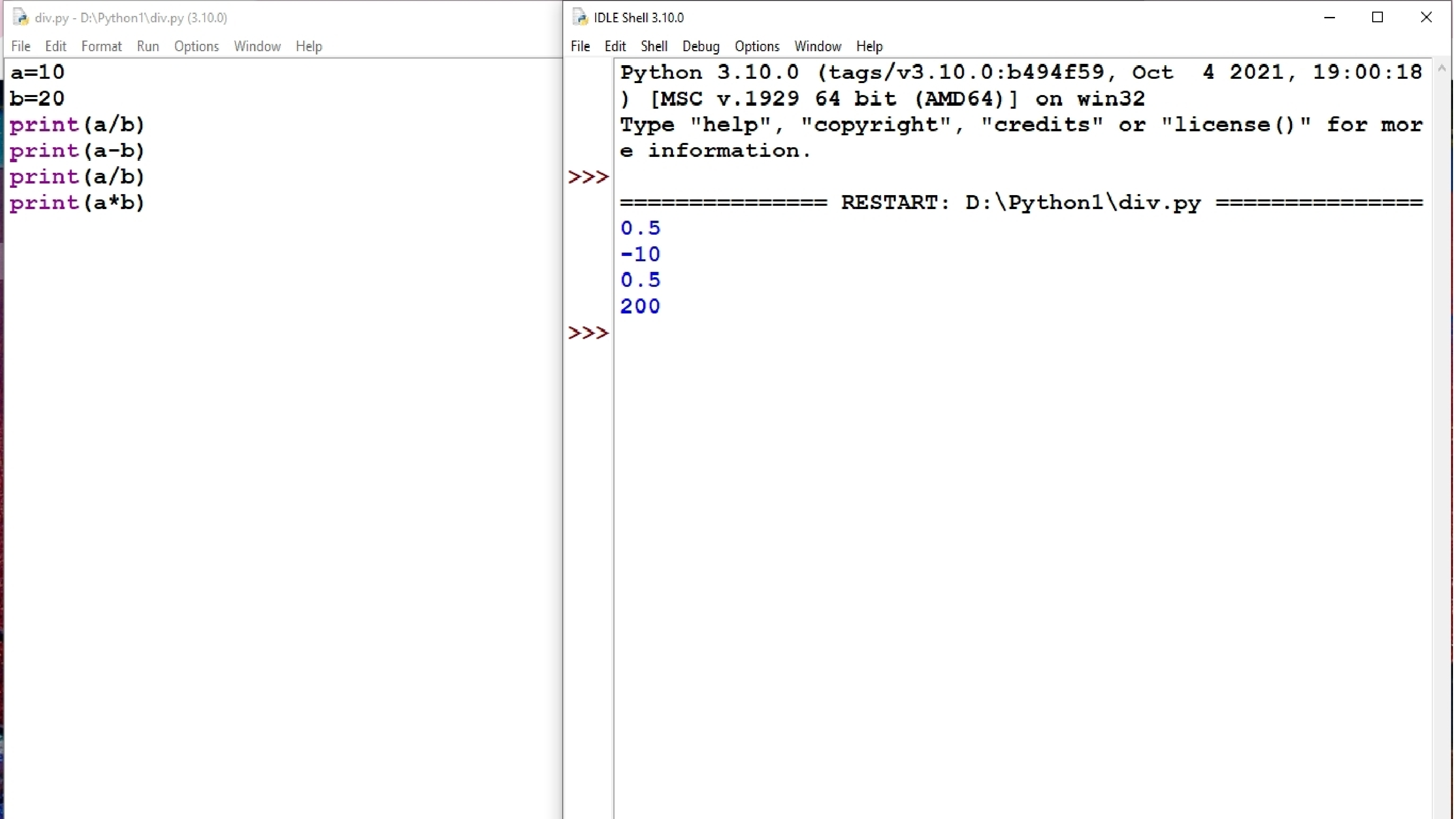
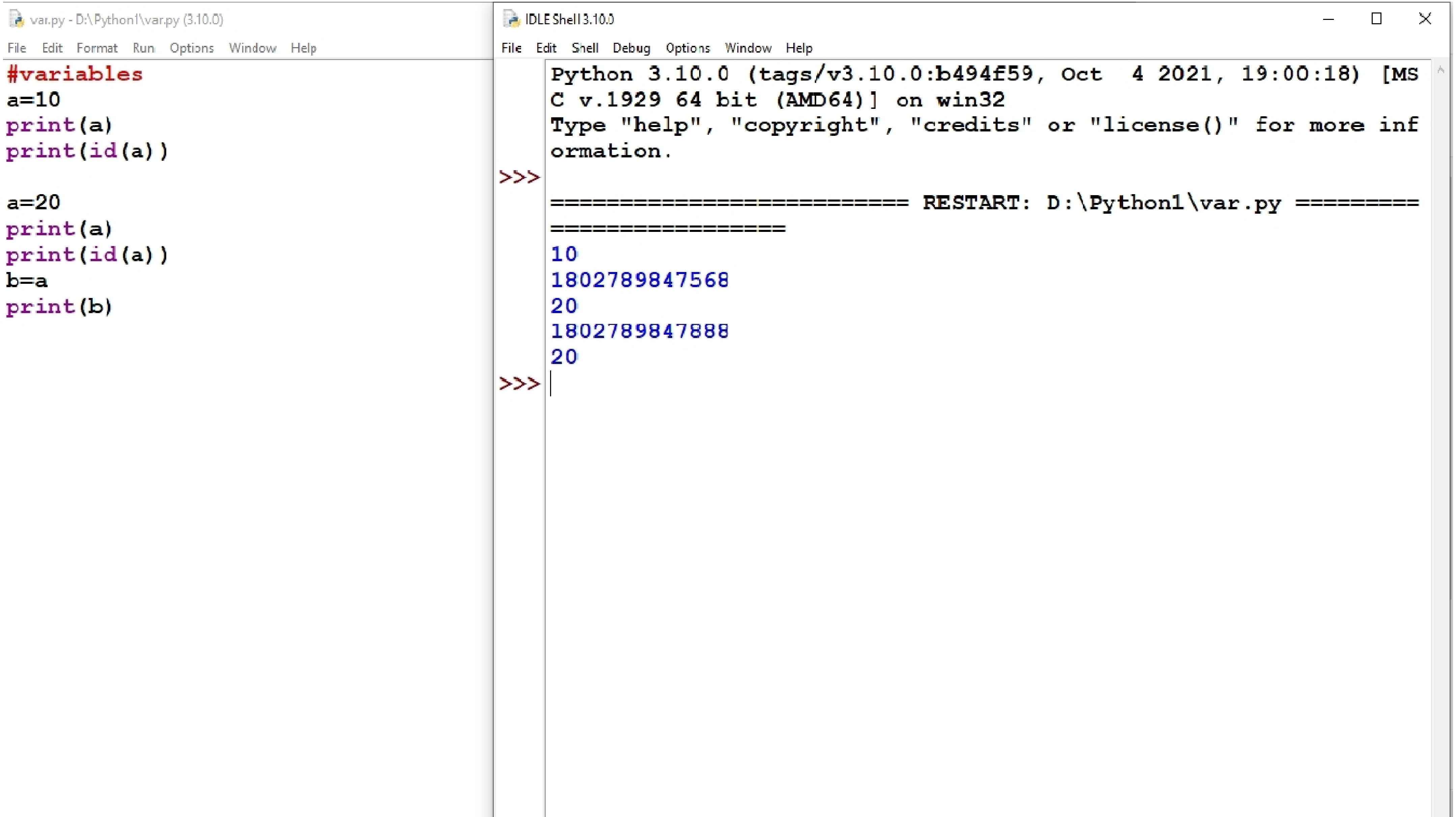


EXECUTE THE PROGRAMS DISCUSSED ON DAY 2


div.py - D:\Python1\div.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

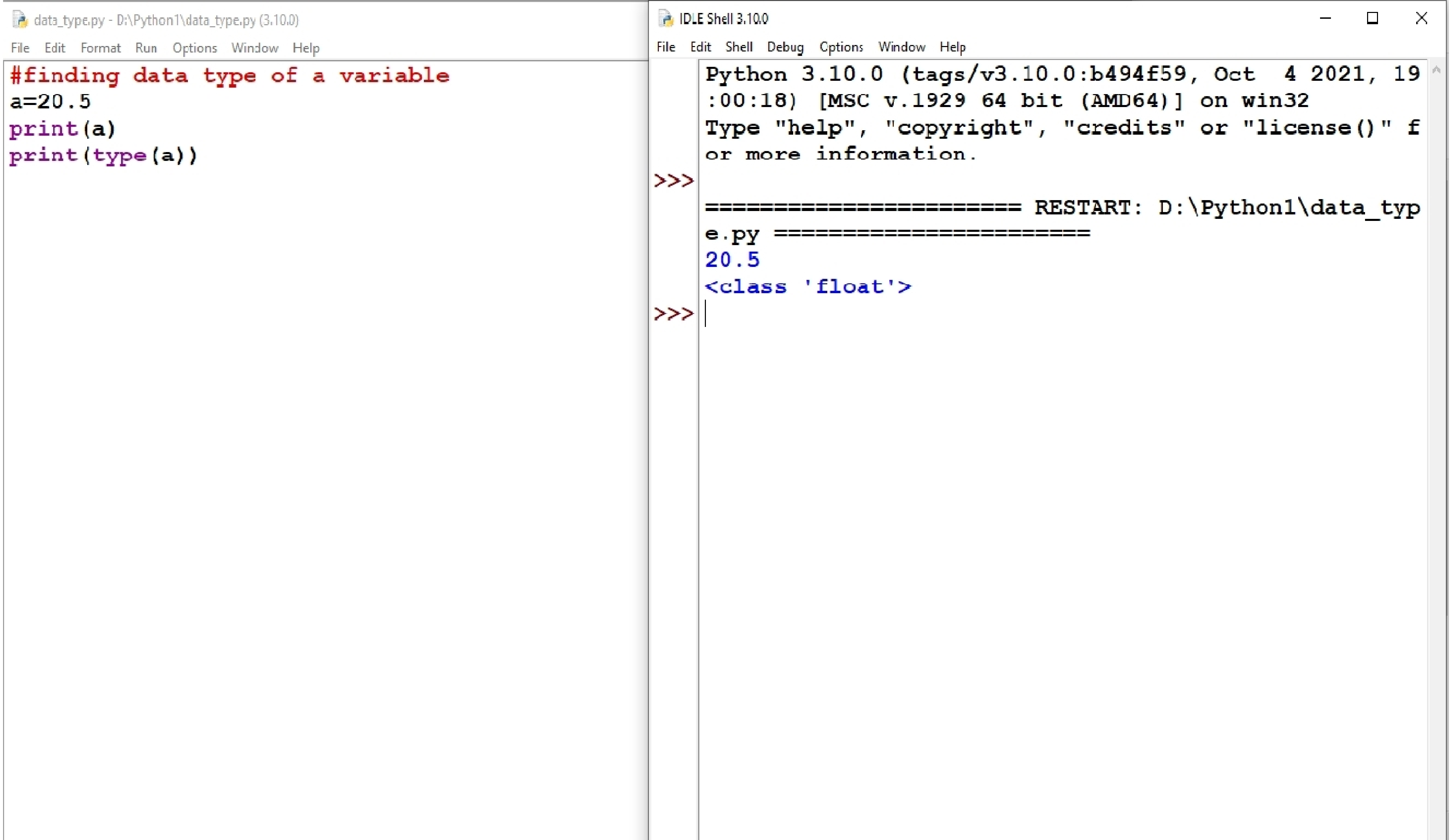
```
a=10
b=20
print(a/b)
print(a-b)
print(a/b)
print(a*b)
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:00:18
) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for mor
e information.
>>>
=============== RESTART: D:\Python1\div.py ===============
0.5
-10
0.5
200
>>>
```


var.py - D:\Python1\var.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

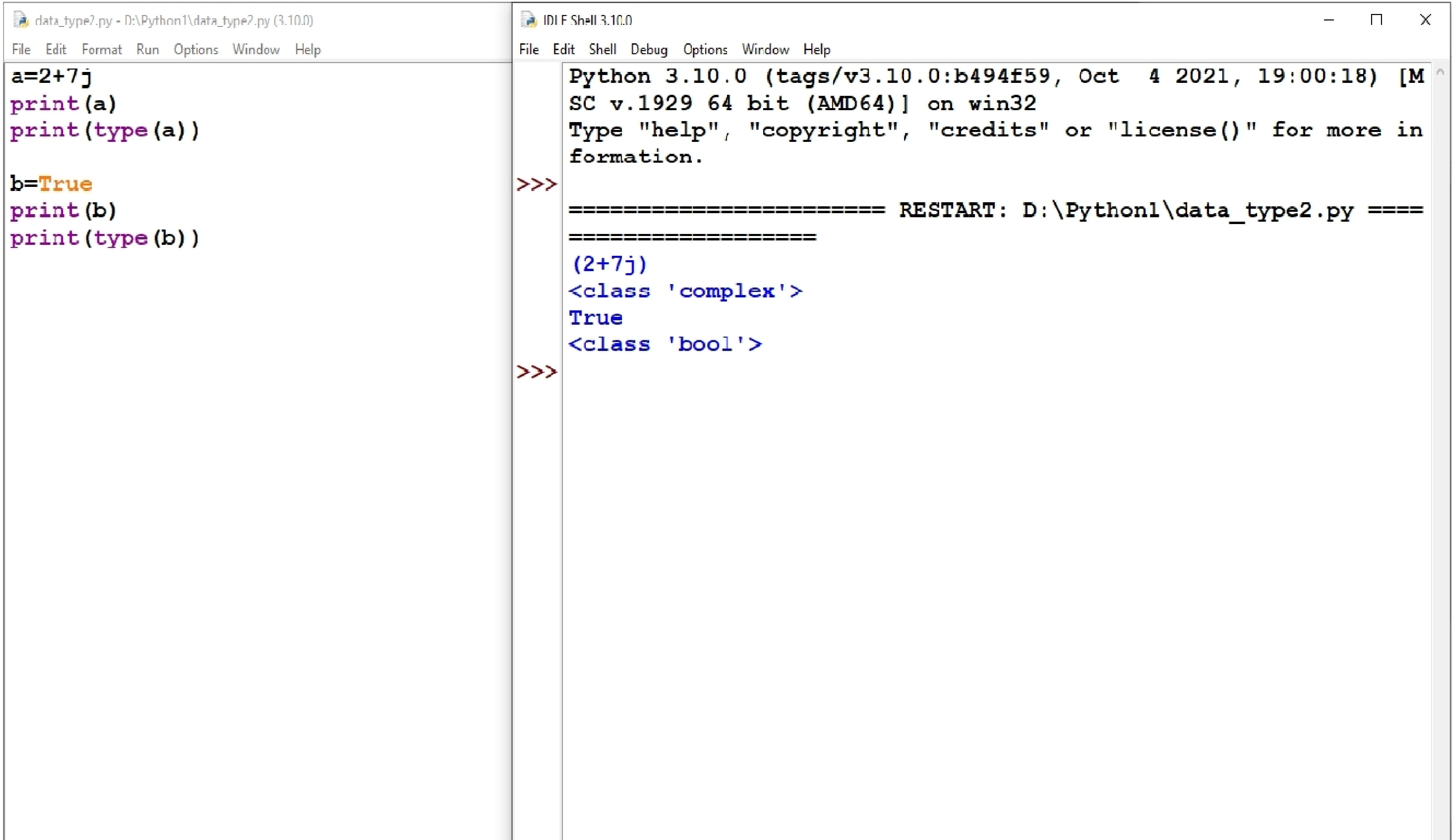
```
#variables
a=10
print(a)
print(id(a))

a=20
print(a)
print(id(a))
b=a
print(b)
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:00:18) [MS
C v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more inf
ormation.
>>>
========================== RESTART: D:\Python1\var.py =========
=================
10
1802789847568
20
1802789847888
20
>>>
```


data_type.py - D:\Python1\data_type.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

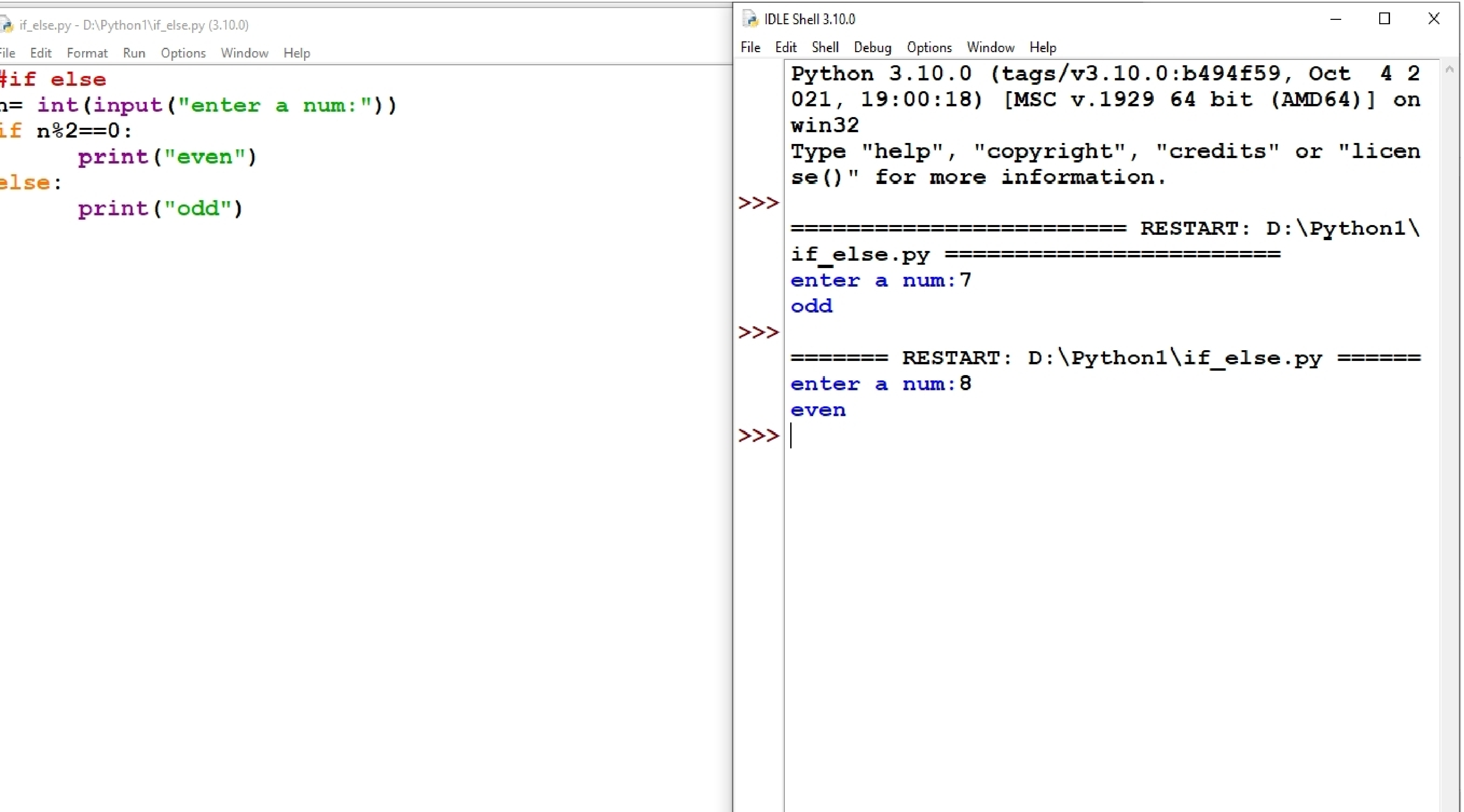
```
#finding data type of a variable
a=20.5
print(a)
print(type(a))
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19
:00:18) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
======================= RESTART: D:\Python1\data_typ
e.py =======================
20.5
<class 'float'>
>>>
```


data_type2.py - D:\Python1\data_type2.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

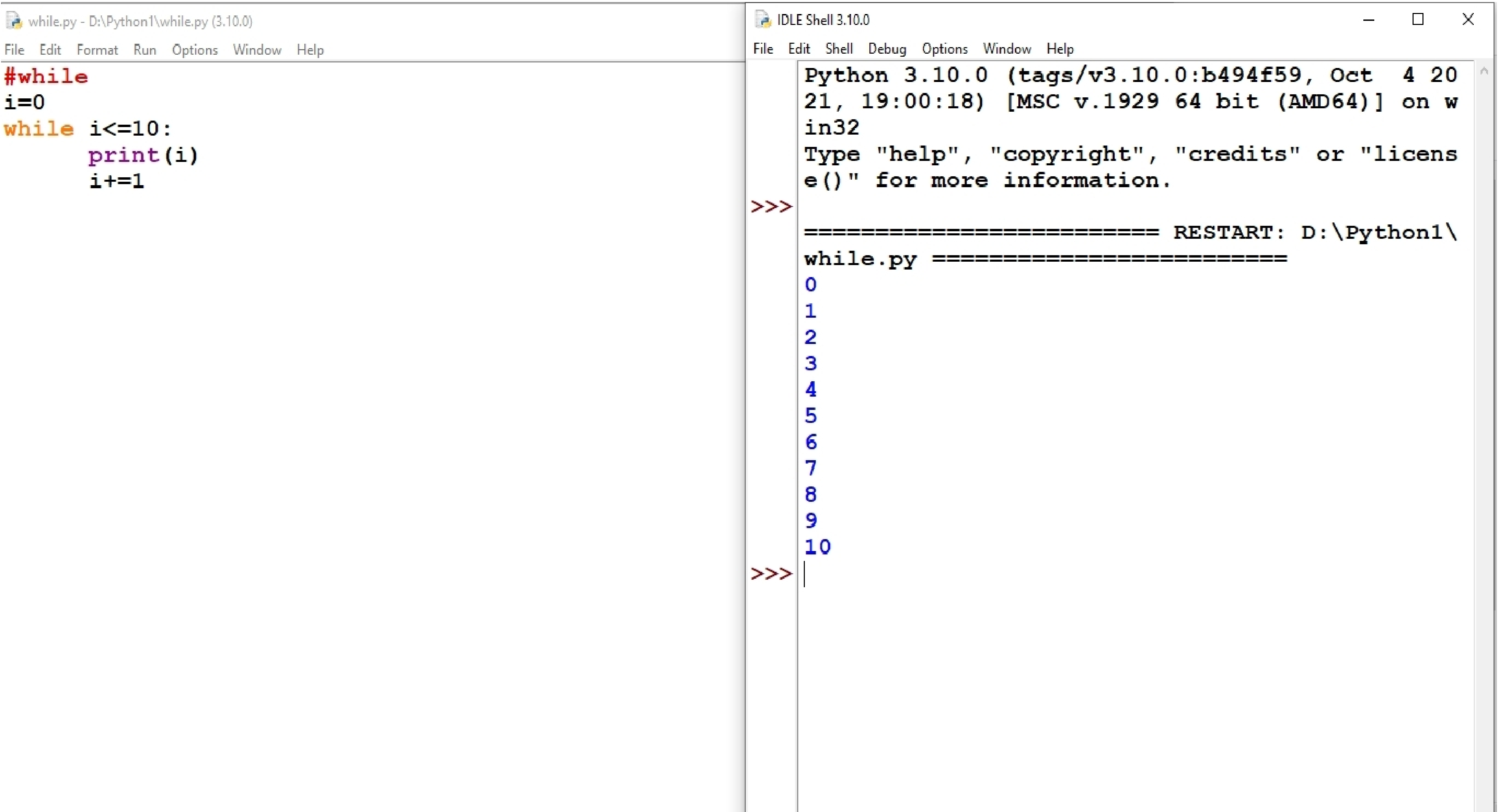
```python
a=2+7j
print(a)
print(type(a))

b=True
print(b)
print(type(b))
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:00:18) [M
SC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more in
formation.
>>>
======================= RESTART: D:\Python1\data_type2.py ====
==================
(2+7j)
<class 'complex'>
True
<class 'bool'>
>>>
```


if_else.py - D:\Python1\if_else.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

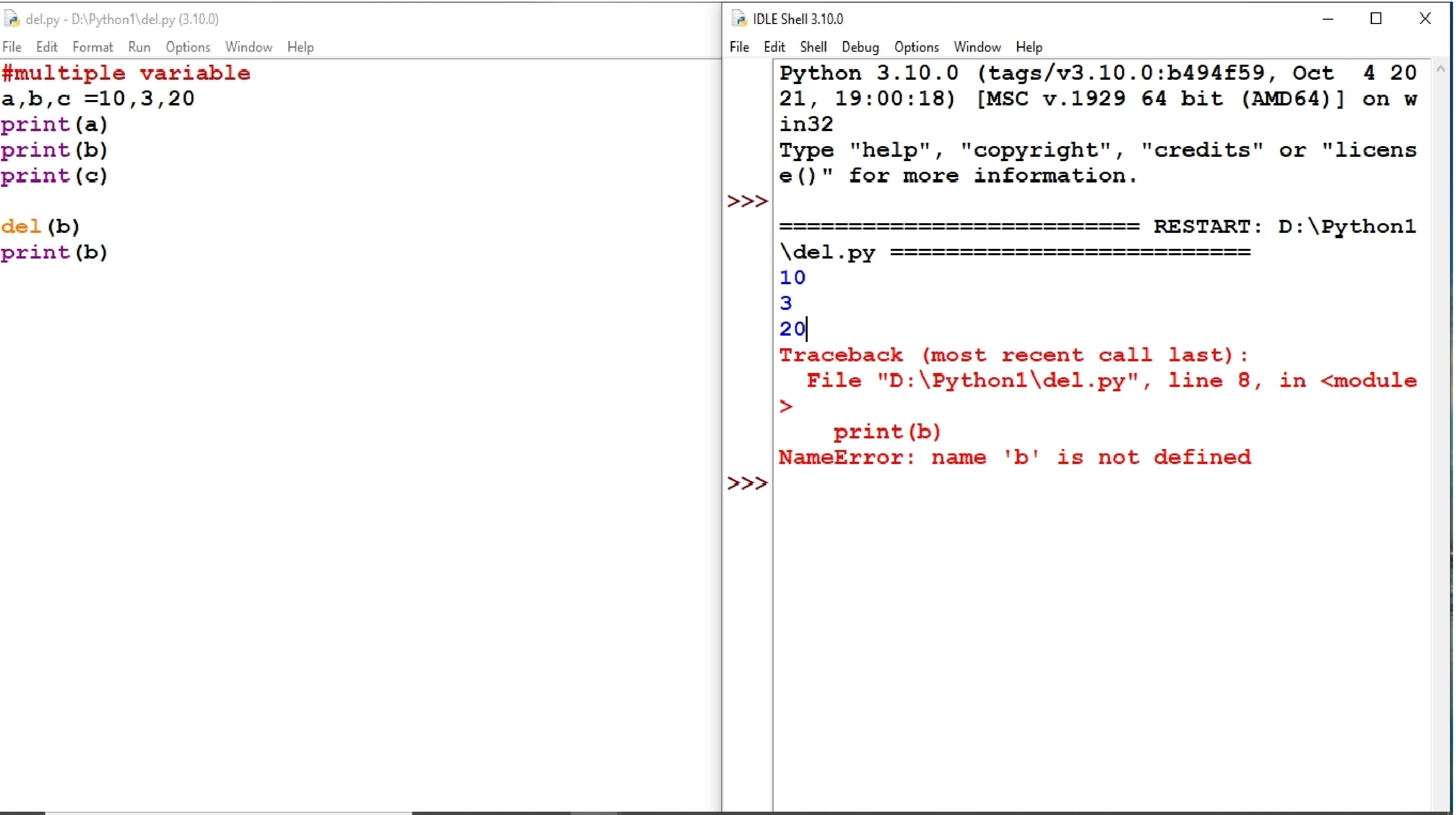
```
#if else
n= int(input("enter a num:"))
if n%2==0:
        print("even")
else:
        print("odd")
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2
021, 19:00:18) [MSC v.1929 64 bit (AMD64)] on
win32
Type "help", "copyright", "credits" or "licen
se()" for more information.
>>>
======================== RESTART: D:\Python1\
if_else.py ========================
enter a num:7
odd
>>>
======= RESTART: D:\Python1\if_else.py ======
enter a num:8
even
>>>
```


while.py - D:\Python1\while.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

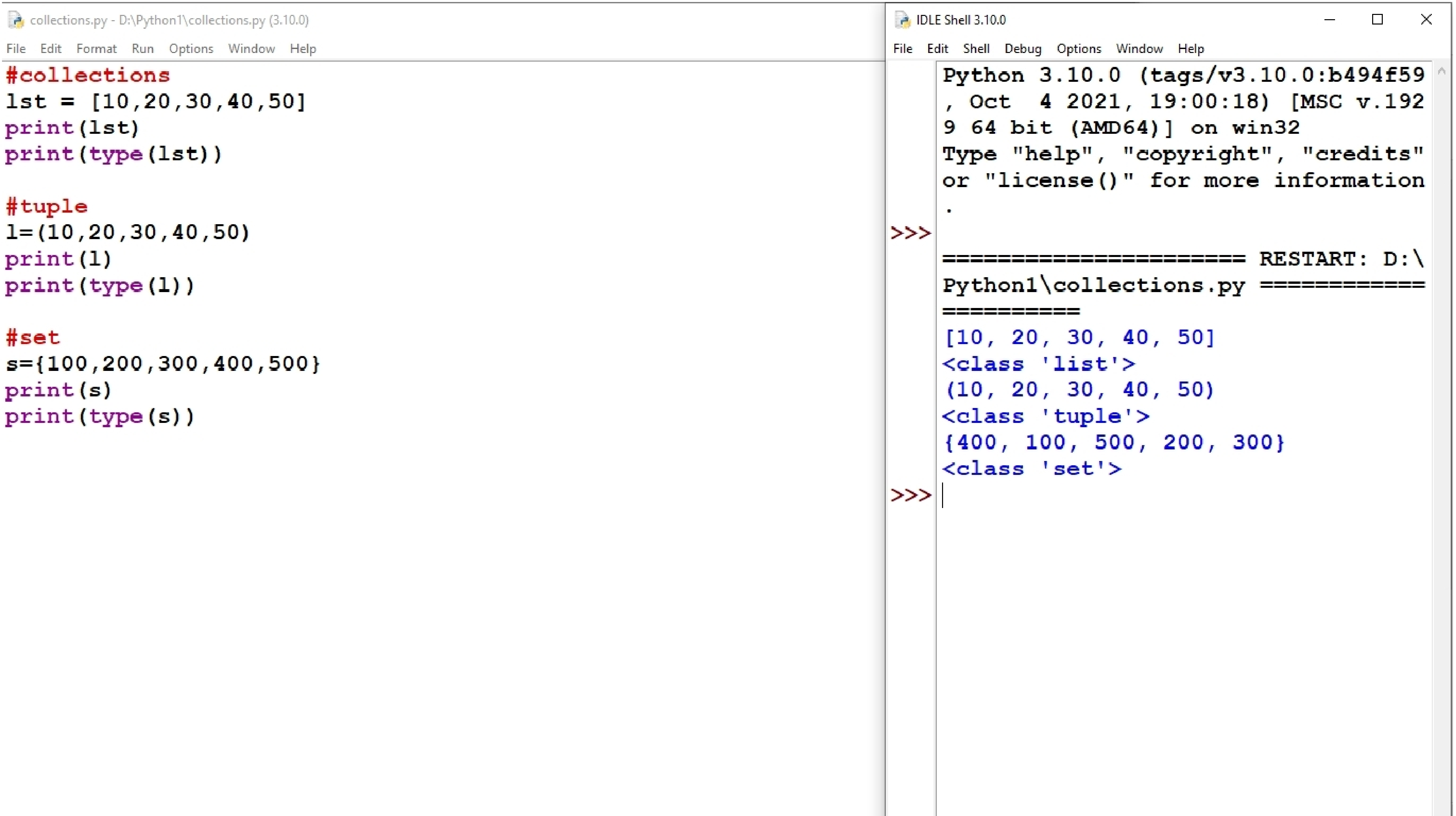
```
#while
i=0
while i<=10:
        print(i)
        i+=1
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:00:18) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> 
========================= RESTART: D:\Python1\while.py =========================
0
1
2
3
4
5
6
7
8
9
10
>>> 
```


del.py - D:\Python1\del.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

```
#multiple variable
a,b,c =10,3,20
print(a)
print(b)
print(c)

del(b)
print(b)
```

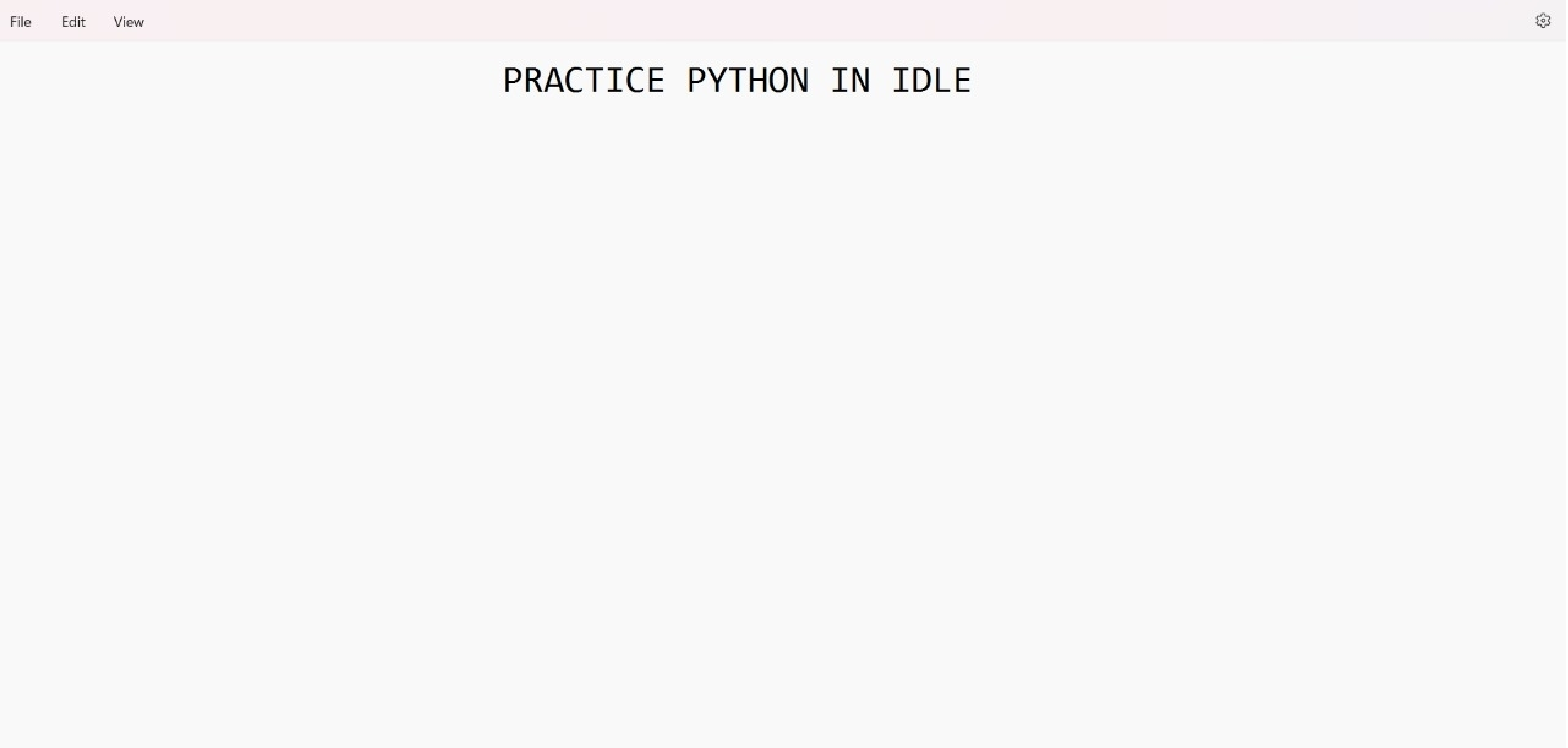
```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:00:18) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> 
========================== RESTART: D:\Python1\del.py ==========================
10
3
20
Traceback (most recent call last):
  File "D:\Python1\del.py", line 8, in <module>
    print(b)
NameError: name 'b' is not defined
>>> 
```



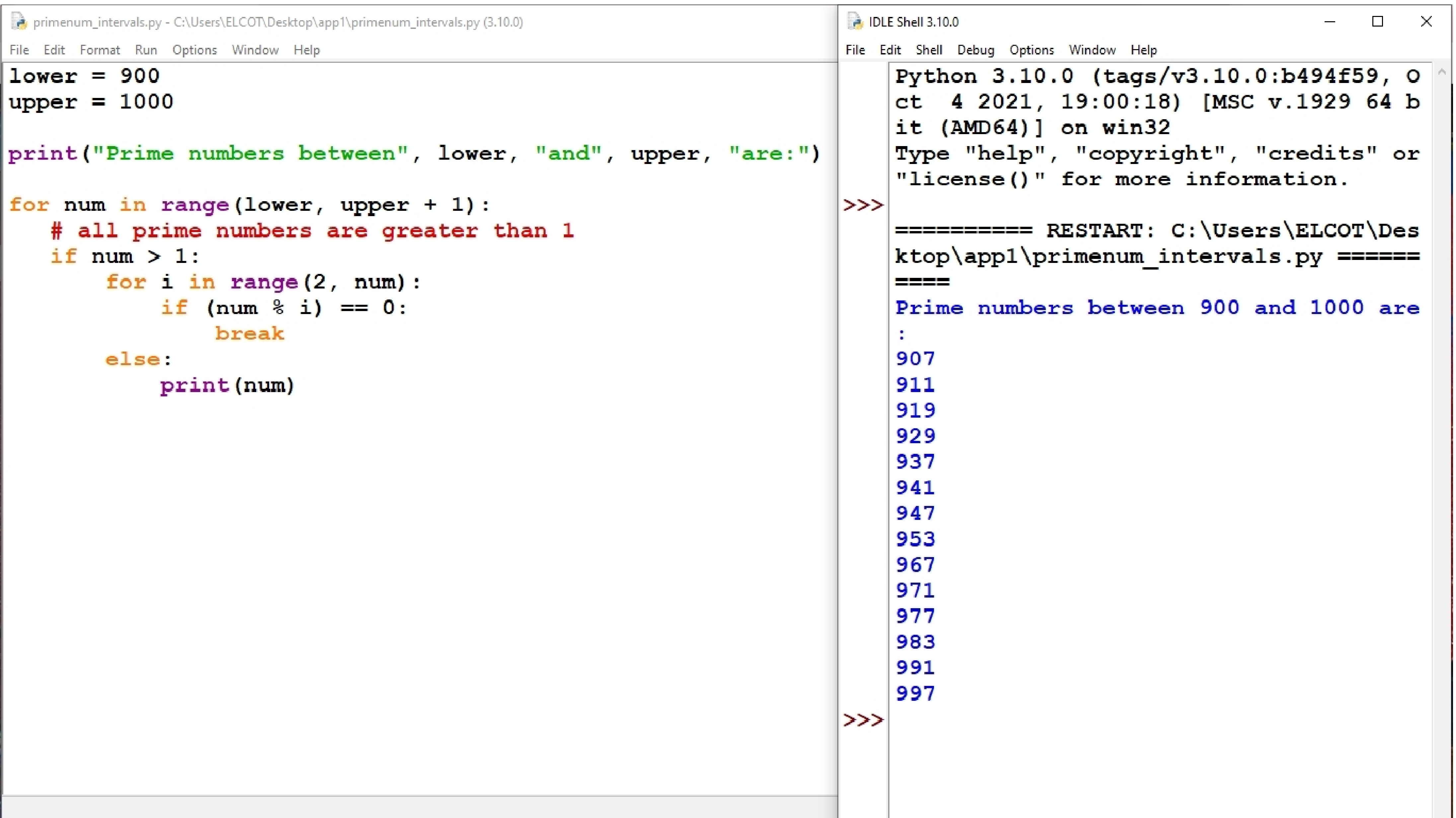
collections.py - D:\Python1\collections.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

```
#collections
lst = [10,20,30,40,50]
print(lst)
print(type(lst))

#tuple
l=(10,20,30,40,50)
print(l)
print(type(l))

#set
s={100,200,300,400,500}
print(s)
print(type(s))
```

```
Python 3.10.0 (tags/v3.10.0:b494f59
, Oct  4 2021, 19:00:18) [MSC v.192
9 64 bit (AMD64)] on win32
Type "help", "copyright", "credits"
or "license()" for more information
.
>>>
====================== RESTART: D:\
Python1\collections.py ============
==========
[10, 20, 30, 40, 50]
<class 'list'>
(10, 20, 30, 40, 50)
<class 'tuple'>
{400, 100, 500, 200, 300}
<class 'set'>
>>>
```

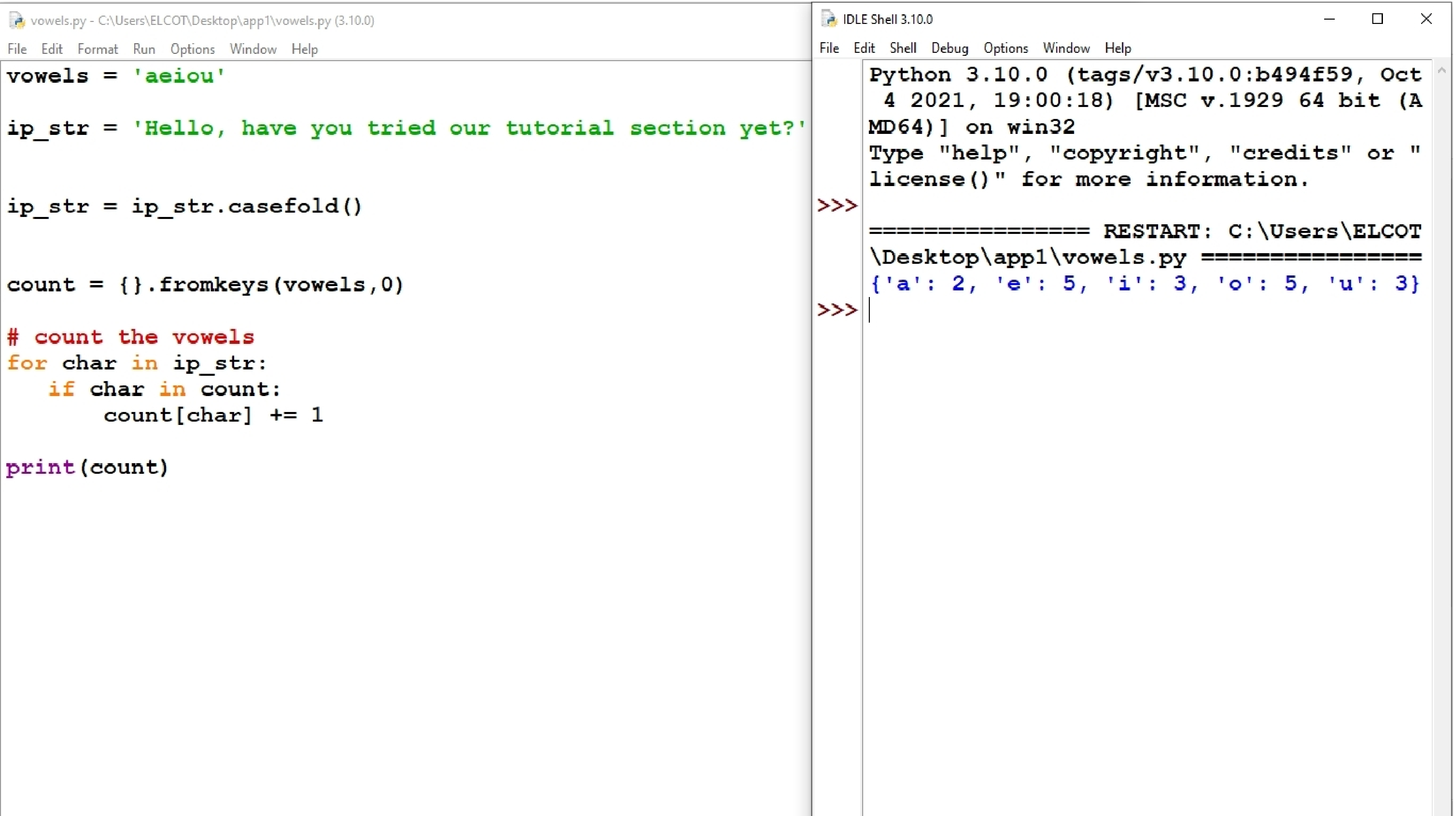


PRACTICE PYTHON IN IDLE


primenum_intervals.py - C:\Users\ELCOT\Desktop\app1\primenum_intervals.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

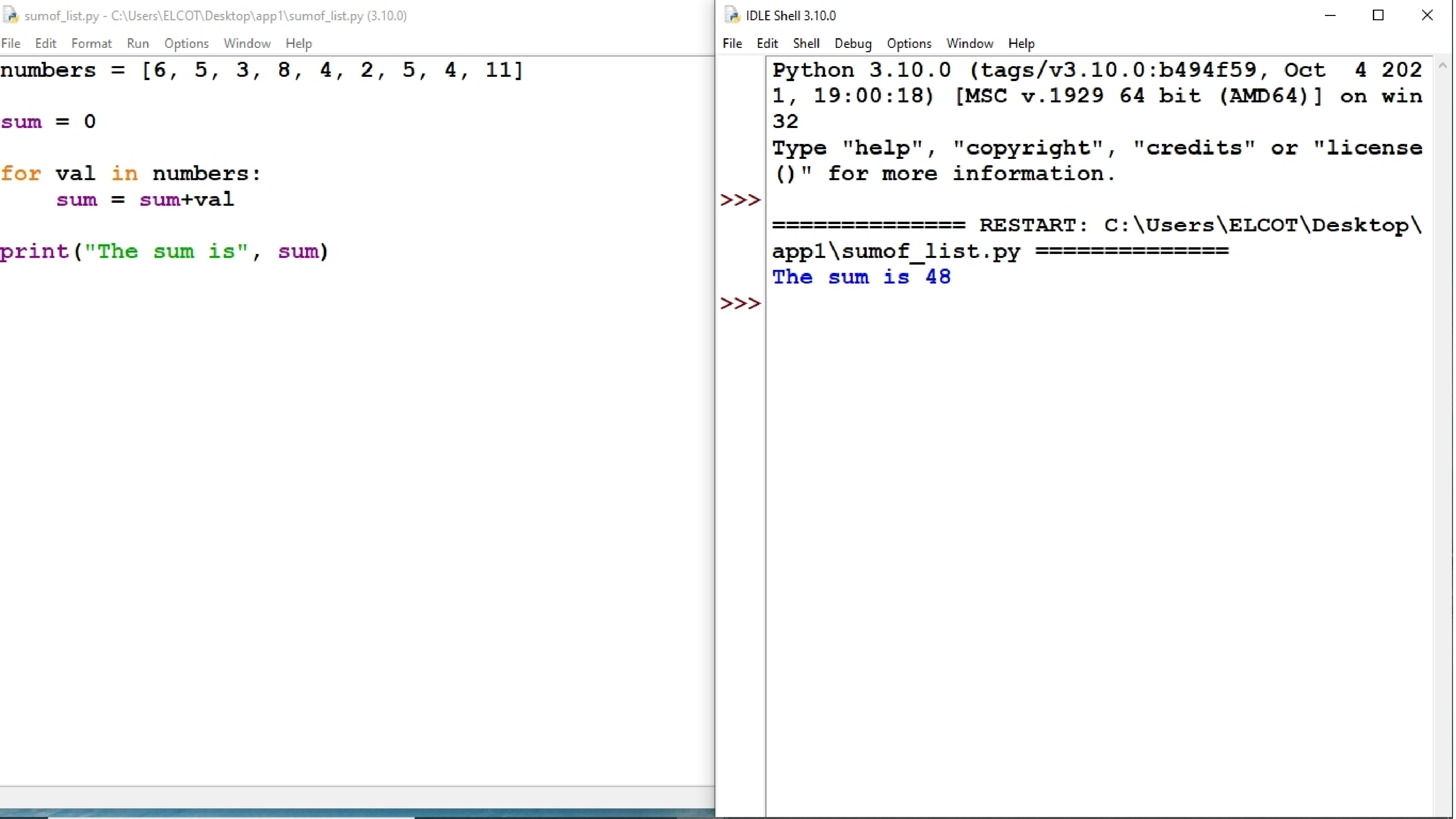
```python
lower = 900
upper = 1000

print("Prime numbers between", lower, "and", upper, "are:")

for num in range(lower, upper + 1):
   # all prime numbers are greater than 1
   if num > 1:
       for i in range(2, num):
           if (num % i) == 0:
               break
       else:
           print(num)
```

```
    Python 3.10.0 (tags/v3.10.0:b494f59, O
    ct  4 2021, 19:00:18) [MSC v.1929 64 b
    it (AMD64)] on win32
    Type "help", "copyright", "credits" or
    "license()" for more information.
>>>
    ========== RESTART: C:\Users\ELCOT\Des
    ktop\app1\primenum_intervals.py ======
    ====
    Prime numbers between 900 and 1000 are
    :
    907
    911
    919
    929
    937
    941
    947
    953
    967
    971
    977
    983
    991
    997
>>>
```


vowels.py - C:\Users\ELCOT\Desktop\app1\vowels.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

```
vowels = 'aeiou'

ip_str = 'Hello, have you tried our tutorial section yet?'


ip_str = ip_str.casefold()


count = {}.fromkeys(vowels,0)

# count the vowels
for char in ip_str:
   if char in count:
       count[char] += 1

print(count)
```

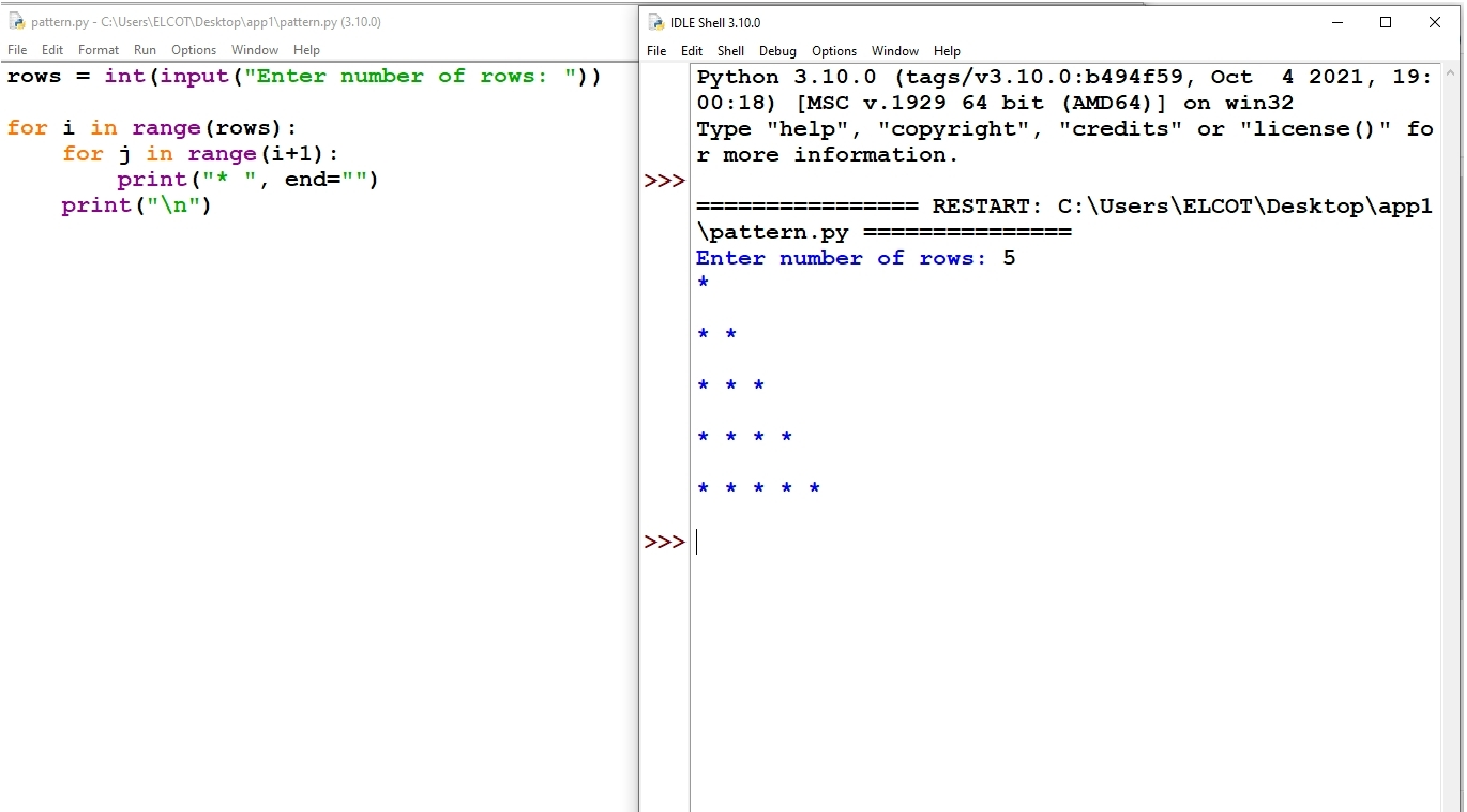
```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct
 4 2021, 19:00:18) [MSC v.1929 64 bit (A
MD64)] on win32
Type "help", "copyright", "credits" or "
license()" for more information.
>>>
================ RESTART: C:\Users\ELCOT
\Desktop\app1\vowels.py ================
{'a': 2, 'e': 5, 'i': 3, 'o': 5, 'u': 3}
>>>
```



sumof_list.py - C:\Users\ELCOT\Desktop\app1\sumof_list.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

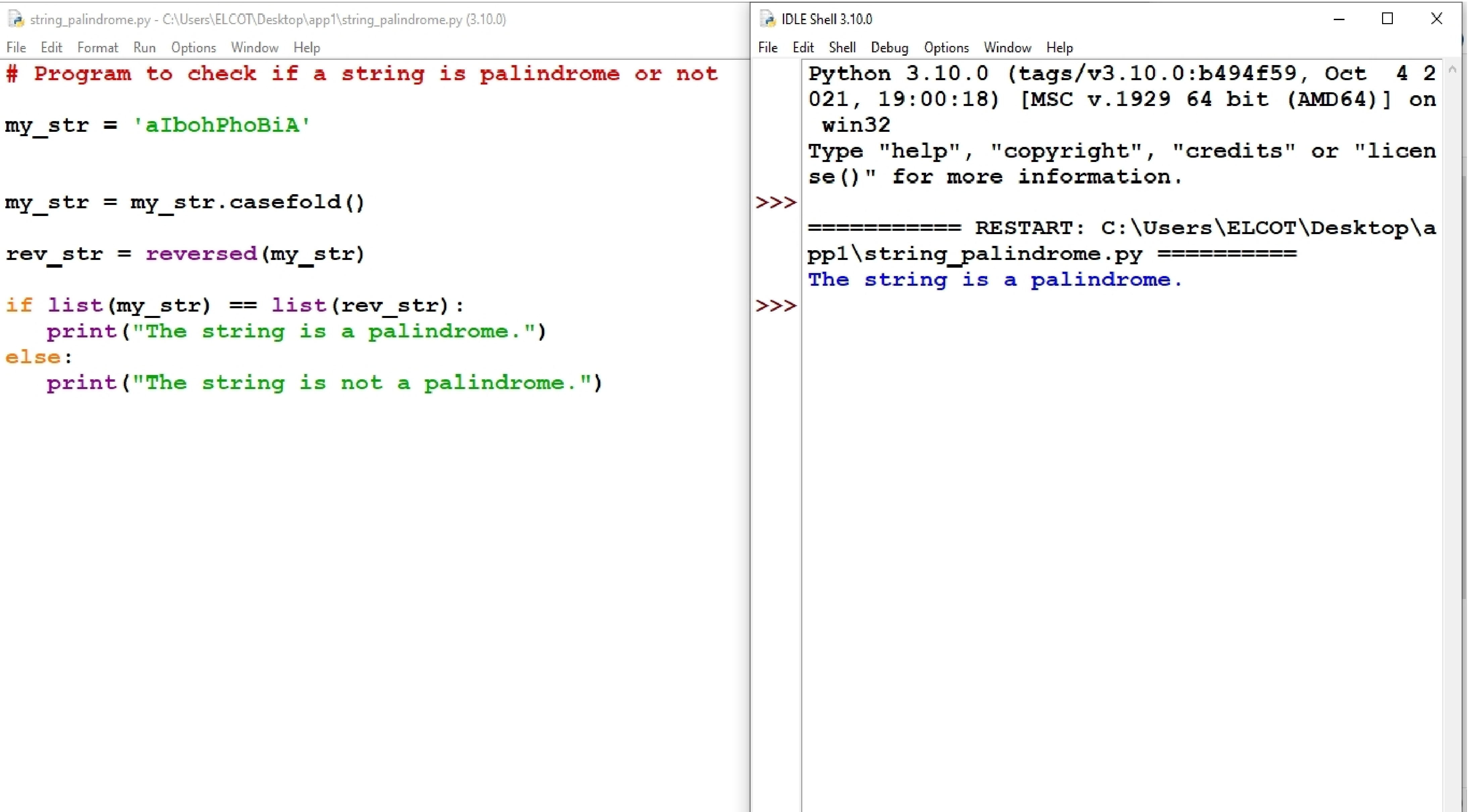
```python
numbers = [6, 5, 3, 8, 4, 2, 5, 4, 11]

sum = 0

for val in numbers:
    sum = sum+val

print("The sum is", sum)
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:00:18) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============== RESTART: C:\Users\ELCOT\Desktop\app1\sumof_list.py ==============
The sum is 48
>>>
```


pattern.py - C:\Users\ELCOT\Desktop\app1\pattern.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

```python
rows = int(input("Enter number of rows: "))

for i in range(rows):
    for j in range(i+1):
        print("* ", end="")
    print("\n")
```

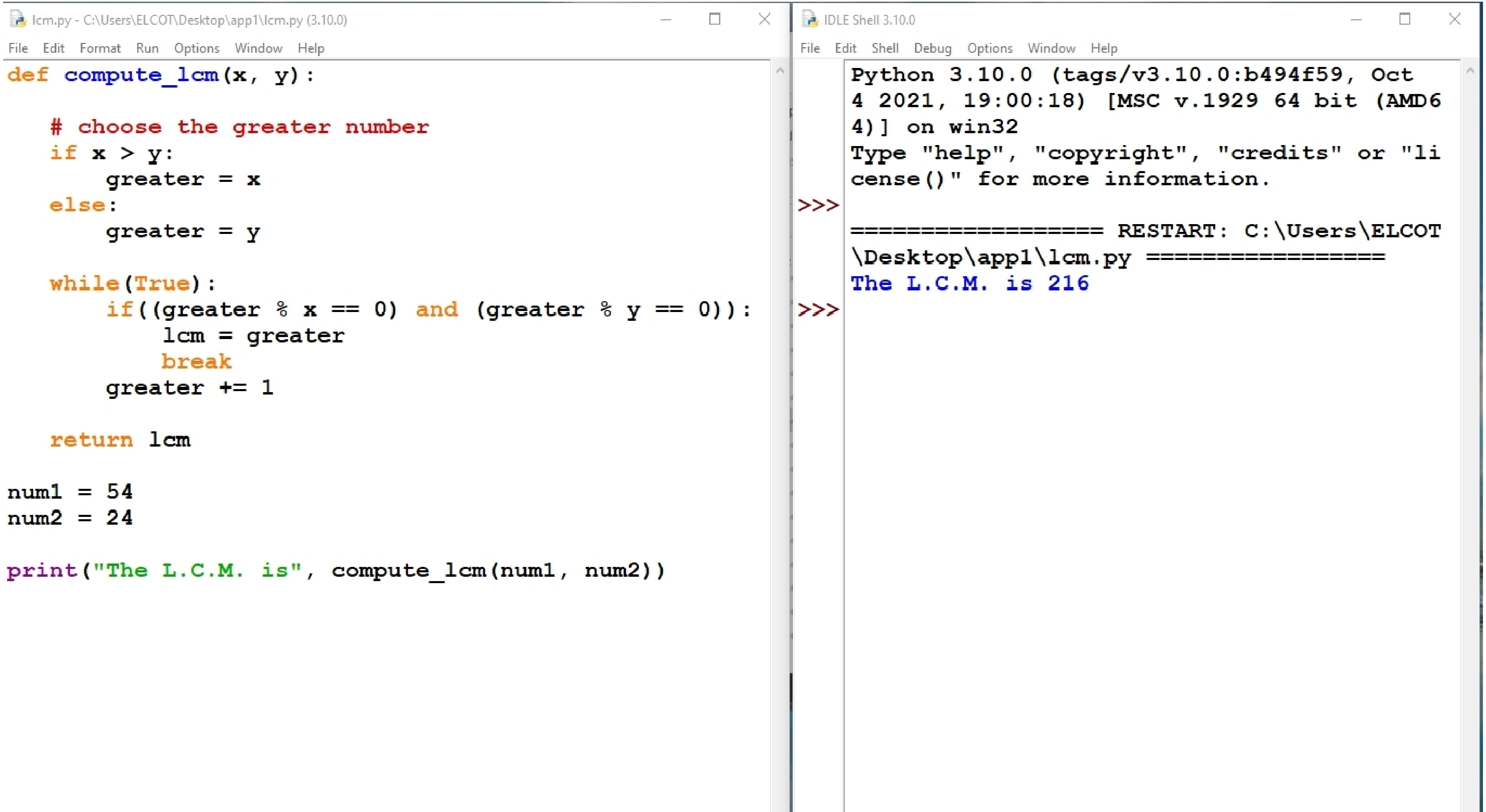
```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:
00:18) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" fo
r more information.
>>>
================ RESTART: C:\Users\ELCOT\Desktop\app1
\pattern.py ===============
Enter number of rows: 5
*

* *

* * *

* * * *

* * * * *


>>> 
```



string_palindrome.py - C:\Users\ELCOT\Desktop\app1\string_palindrome.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

```python
# Program to check if a string is palindrome or not

my_str = 'aIbohPhoBiA'


my_str = my_str.casefold()

rev_str = reversed(my_str)

if list(my_str) == list(rev_str):
   print("The string is a palindrome.")
else:
   print("The string is not a palindrome.")
```

```
    Python 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2
    021, 19:00:18) [MSC v.1929 64 bit (AMD64)] on
     win32
    Type "help", "copyright", "credits" or "licen
    se()" for more information.
>>> 
    =========== RESTART: C:\Users\ELCOT\Desktop\a
    pp1\string_palindrome.py ==========
    The string is a palindrome.
>>> 
```



lcm.py - C:\Users\ELCOT\Desktop\app1\lcm.py (3.10.0)
File Edit Format Run Options Window Help
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help

```python
def compute_lcm(x, y):

    # choose the greater number
    if x > y:
        greater = x
    else:
        greater = y

    while(True):
        if((greater % x == 0) and (greater % y == 0)):
            lcm = greater
            break
        greater += 1

    return lcm

num1 = 54
num2 = 24

print("The L.C.M. is", compute_lcm(num1, num2))
```

```
Python 3.10.0 (tags/v3.10.0:b494f59, Oct
4 2021, 19:00:18) [MSC v.1929 64 bit (AMD6
4)] on win32
Type "help", "copyright", "credits" or "li
cense()" for more information.
>>>
================== RESTART: C:\Users\ELCOT
\Desktop\app1\lcm.py =================
The L.C.M. is 216
>>>
```