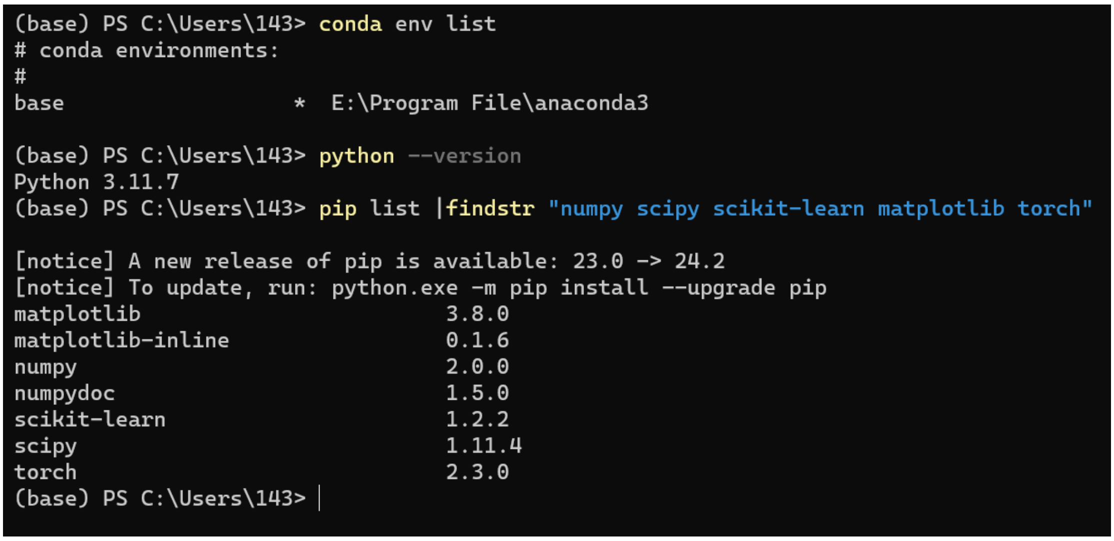
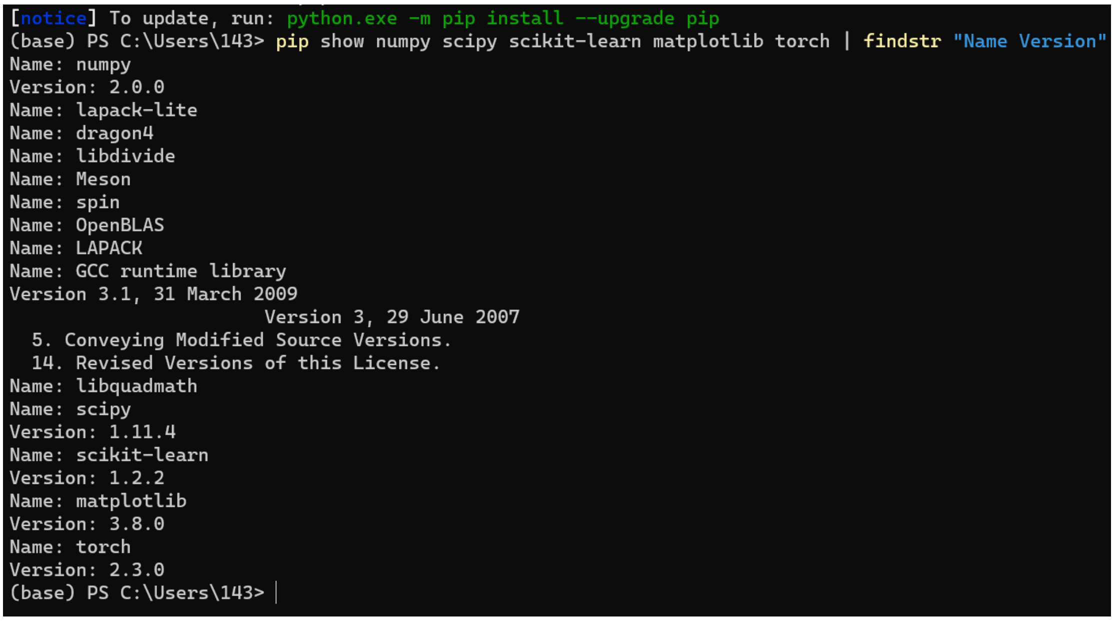


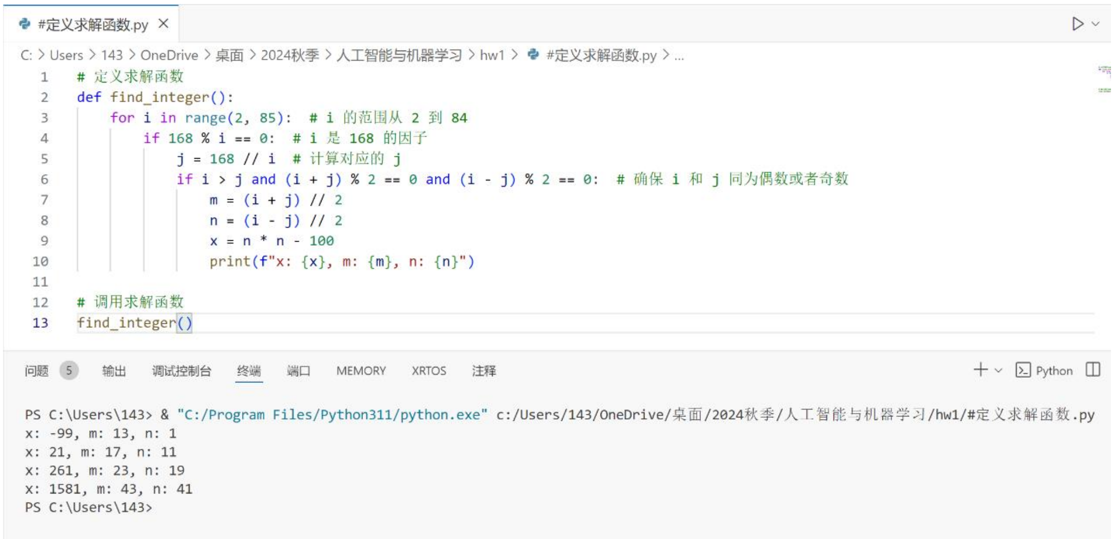
```
(base) PS C:\Users\143> conda env list
# conda environments:
#
base                  *  E:\Program File\anaconda3

(base) PS C:\Users\143> python --version
Python 3.11.7
(base) PS C:\Users\143> pip list |findstr "numpy scipy scikit-learn matplotlib torch"

[notice] A new release of pip is available: 23.0 -> 24.2
[notice] To update, run: python.exe -m pip install --upgrade pip
matplotlib                        3.8.0
matplotlib-inline                 0.1.6
numpy                             2.0.0
numpydoc                          1.5.0
scikit-learn                      1.2.2
scipy                             1.11.4
torch                             2.3.0
(base) PS C:\Users\143>
```



```
[notice] To update, run: python.exe -m pip install --upgrade pip
(base) PS C:\Users\143> pip show numpy scipy scikit-learn matplotlib torch | findstr "Name Version"
Name: numpy
Version: 2.0.0
Name: lapack-lite
Name: dragon4
Name: libdivide
Name: Meson
Name: spin
Name: OpenBLAS
Name: LAPACK
Name: GCC runtime library
Version 3.1, 31 March 2009
                       Version 3, 29 June 2007
  5. Conveying Modified Source Versions.
  14. Revised Versions of this License.
Name: libquadmath
Name: scipy
Version: 1.11.4
Name: scikit-learn
Version: 1.2.2
Name: matplotlib
Version: 3.8.0
Name: torch
Version: 2.3.0
(base) PS C:\Users\143>
```

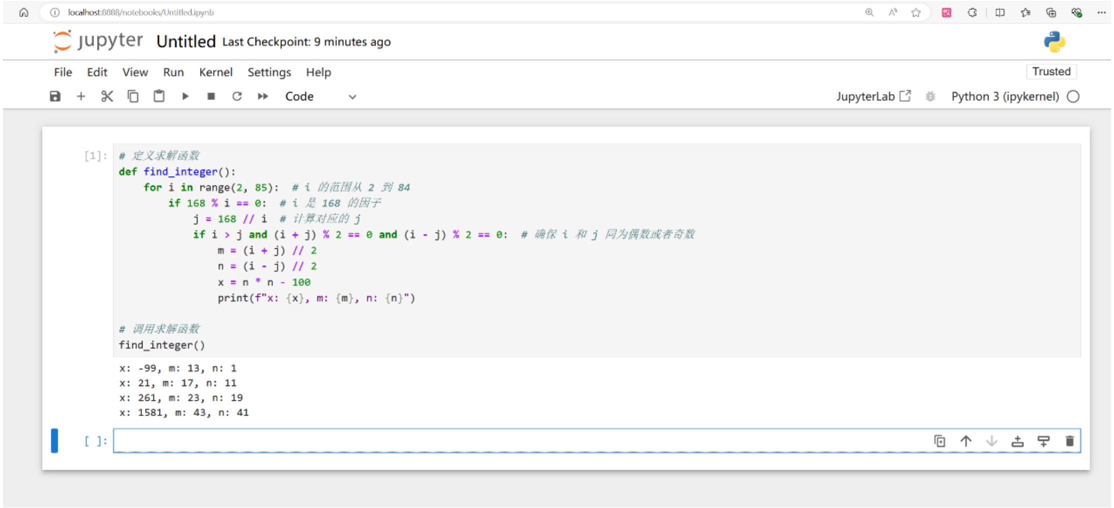


#定义求解函数.py
C: > Users > 143 > OneDrive > 桌面 > 2024秋季 > 人工智能与机器学习 > hw1 > #定义求解函数.py > ...
问题 5
输出
调试控制台
终端
端口
MEMORY
XRTOS
注释
Python

```python
# 定义求解函数
def find_integer():
    for i in range(2, 85):  # i 的范围从 2 到 84
        if 168 % i == 0:  # i 是 168 的因子
            j = 168 // i  # 计算对应的 j
            if i > j and (i + j) % 2 == 0 and (i - j) % 2 == 0:  # 确保 i 和 j 同为偶数或者奇数
                m = (i + j) // 2
                n = (i - j) // 2
                x = n * n - 100
                print(f"x: {x}, m: {m}, n: {n}")

# 调用求解函数
find_integer()
```

```
PS C:\Users\143> & "C:/Program Files/Python311/python.exe" c:/Users/143/OneDrive/桌面/2024秋季/人工智能与机器学习/hw1/#定义求解函数.py
x: -99, m: 13, n: 1
x: 21, m: 17, n: 11
x: 261, m: 23, n: 19
x: 1581, m: 43, n: 41
PS C:\Users\143>
```



localhost:8888/notebooks/Untitled.ipynb
jupyter Untitled Last Checkpoint: 9 minutes ago
Trusted
File Edit View Run Kernel Settings Help
Code
JupyterLab
Python 3 (ipykernel)

```
[1]: # 定义求解函数
def find_integer():
    for i in range(2, 85):  # i 的范围从 2 到 84
        if 168 % i == 0:  # i 是 168 的因子
            j = 168 // i  # 计算对应的 j
            if i > j and (i + j) % 2 == 0 and (i - j) % 2 == 0:  # 确保 i 和 j 同为偶数或者奇数
                m = (i + j) // 2
                n = (i - j) // 2
                x = n * n - 100
                print(f"x: {x}, m: {m}, n: {n}")

# 调用求解函数
find_integer()
```

```
x: -99, m: 13, n: 1
x: 21, m: 17, n: 11
x: 261, m: 23, n: 19
x: 1581, m: 43, n: 41
```

```
[ ]:
```