

1. 配置环境

```
(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ conda env list
# conda environments:
#
base                    * F:\python\conda
environment.yml         F:\python\conda\envs\environment.yml
myenv.yml               F:\python\conda\envs\myenv.yml
myproject               F:\python\conda\envs\myproject
prj1                    F:\python\conda\envs\prj1
prj2                    F:\python\conda\envs\prj2
week04                  F:\python\conda\envs\week04
week05.yml              F:\python\conda\envs\week05.yml
week06                  F:\python\conda\envs\week06
```

2.

```
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python guessing_game.py
欢迎来到猜数字游戏！我已经想好了一个 1 到 100 之间的数字，你可以开始猜啦。
(第 1 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): 3
猜的数字太小了，再试试。
(第 2 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): 51
猜的数字太小了，再试试。
(第 3 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): 88
猜的数字太大了，再试试。
(第 4 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): 77
猜的数字太小了，再试试。
(第 5 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): 80
猜的数字太小了，再试试。
(第 6 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): 85
猜的数字太大了，再试试。
(第 7 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): 83
恭喜你 🎉，猜对了！
游戏结束，再见 🙋。
(week06)
```

3.

```
$ python -m pdb guessing_game.py
> d:\gitcode\week06\guessing_game.py(1)<module>()
-> import random
(Pdb) l
1  -> import random
2
3
4  def guessing_game():
5      # 生成 1 到 100 之间的随机整数
6      secret_number = random.randint(1, 100)
7      n = 0
8
9      print("欢迎来到猜数字游戏！我已经想好了一个 1 到 100 之间的数字，你
10
11      while True:
(Pdb) n
> d:\gitcode\week06\guessing_game.py(4)<module>()
-> def guessing_game():
(Pdb) c
欢迎来到猜数字游戏！我已经想好了一个 1 到 100 之间的数字，你可以开始猜啦。
(第 1 次尝试) 请输入你猜的数字 (输入整数，或者输入 q 回车退出): c
```

4.

```
# for 迭代循环 (iteration loop)
print("for 迭代循环示例: ")
fruits = ["apple", "banana", "cherry"]
for fruit in fruits:
    fruit = fruit + ", ok" # fruit += ", ok"
    print(fruit)

# 创建一个字典, 存储学生的成绩信息
print("\nfor 字典循环实例: ")
student_scores = {"Alice": 85, "Bob": 90, "Charlie": 78}
# 使用 for 循环遍历字典的键
for name in student_scores:
    print(f"{name}: {student_scores[name]}")

# while 条件循环 (conditional loop)
print("\nwhile 条件循环示例: ")

# while 条件循环 (conditional loop)
print("\nwhile 条件循环示例: ")
count = 0
while count < 3:
    print(count)
    count = count + 1

# continue 跳至下一轮循环
print("\ncontinue 跳至下一轮循环示例: ")
for num in numbers:
    if num == 3:
        continue
    print(num)

# for...else 循环未被打断的处理
print("\nfor...else 循环未被打断的处理示例: ")
for num in numbers:
    if num == 6:
        break
else:
    print("循环未被 break 打断")

# try...except[...except...else...finally] 捕捉异常的处理
print("\ntry...except 捕捉异常的处理示例: ")
try:
    result = 1 / 0
except ZeroDivisionError:
    print("发生了除零错误")
else:
    print("没有发生异常")
finally:
    print("无论是否发生异常, finally 块都会执行")

# raise 主动抛出异常
print("\nraise 主动抛出异常示例: ")

def check_age(age):
    if age < 0:
        raise ValueError("年龄不能为负数")
    return age

try:
    age = check_age(-5)
except ValueError as e:
    print(e)

raise 主动抛出异常示例:
年龄不能为负数
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/we
$ python flow_controls.py
for 迭代循环示例:
apple, ok
banana, ok
cherry, ok

for 字典循环实例:
Alice: 85
Bob: 90
Charlie: 78

while 条件循环示例:
0
1
2

break 打断跳出循环示例:
1
2

continue 跳至下一轮循环示例:
1
2
4
5

for...else 循环未被打断的处理示例:
循环未被 break 打断

for...else 循环未被打断的处理示例:
循环未被 break 打断

if 条件分支示例:
x 大于 5

if...elif 多重条件分支示例:
y 小于 25 但不小于 10

if...else 未满足条件的处理示例:
z 小于等于 5

try...except 捕捉异常的处理示例:
发生了除零错误
无论是否发生异常, finally 块都会执行

raise 主动抛出异常示例:
年龄不能为负数
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/w
$ |
```

```

(Pdb) l
1      import mylib # noqa: F401
2
3  -> breakpoint()
[EOF]
(Pdb) p mylib
<module 'mylib' from 'D:\\gitcode\\week06\\mylib.py'>
(Pdb) import wat
(Pdb) wat / mylib

value: <module 'mylib' from 'D:\\gitcode\\week06\\mylib.py'>
type: module

Public attributes:
  def func1()

(Pdb) q
*** WARNING: file 'D:\\gitcode\\week06\\myjob.py' was edited, running
Traceback (most recent call last):
  File "D:\\gitcode\\week06\\myjob.py", line 3, in <module>
    mylib.func1()
    ^^^^^^^^^^^^^
  File "F:\\python\\conda\\envs\\week06\\Lib\\bdb.py", line 116, in tr
    return self.dispatch_opcode(frame, arg)
           ~~~~~^~~~~~
  File "F:\\python\\conda\\envs\\week06\\Lib\\bdb.py", line 216, in di
    if self.quitting: raise BdbQuit
                       ^^^^^^^^^^^
bdb.BdbQuit
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python myjob.py
0.0710678118654755
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$

```

<pre> myjob.py > ... 1 import mylib # noqa: F401 2 3 y = mylib.func1() 4 print(y) 5 6 try: 7 y = mylib.func1(0) 8 except TypeError as e: 9 print(e) 10 11 y = mylib.func2() 12 print(y) 13 </pre>	<pre> (week06) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main) \$ python myjob.py 0.0710678118654755 (week06) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main) \$ python myjob.py 0.0710678118654755 None func1() takes 0 positional arguments but 1 was given 1.3666002653407556 1.3666002653407556 (week06) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main) \$ </pre>
<pre> print(e) y = mylib.func2() print(y) y = mylib.func3(45) print(y) </pre>	<pre> None func1() takes 0 positional arguments but 1 was given 1.3666002653407556 1.3666002653407556 -0.2917960675006306 (week06) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main) \$ </pre>


```

    y = mylib.func1(0)
except TypeError as e:
    print(e)

y = mylib.func2()
print(y)

y = mylib.func3(45)
print(y)

y = mylib.func3(x=53)
print(y)

y = mylib.func4(48)
print(y)

y = mylib.func4(x=49)
print(y)

```

```

-0.2917960675006306
0.28010988928051805
-0.07179676972449123
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python myjob.py
0.0710678118654755
None
func1() takes 0 positional arguments but 1 was given
1.3666002653407556
1.3666002653407556
-0.2917960675006306
0.28010988928051805
-0.07179676972449123
0.0
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$

```

```

25 print(y)
26 y = mylib.func4(x=49)
27 print(y)
28
29 print(mylib.calculate(10, 5, "add"))
30 print(mylib.calculate(operation="add", b=5, a=10))
31 print(mylib.calculate(b=5, a=10, operation="subtract"))
32
33 try:
34     print(mylib.func6(a=10, b=5))
35 except TypeError as e:
36     print(e)
37
38 try:
39     print(mylib.func7(10, 5, "subtract"))
40 except TypeError as e:
41     print(e)
42

```

```

0.0710678118654755
None
func1() takes 0 positional arguments but 1 was given
1.3666002653407556
1.3666002653407556
-0.2917960675006306
0.28010988928051805
-0.07179676972449123
0.0
0.0
15
15
5
func6() got some positional-only arguments passed as keyword arguments: 'a'
func7() takes 2 positional arguments but 3 were given
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$

```

```

38 try:
39     print(mylib.func7(10, 5, "subtract"))
40 except TypeError as e:
41     print(e)
42
43 print(mylib.func8(4, 8, 18, 20))
44
45 mylib.func9(name="Alice", age="25", city="New York")
46
47 tuple_args = (10, 20)
48 mylib.func10(*tuple_args)
49
50 list_args = (10, 20)
51 mylib.func10(*list_args)
52

```

```

MINGW64: d/gitcode/week06 x + v
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python myjob.py
0.0710678118654755
None
func1() takes 0 positional arguments but 1 was given
1.3666002653407556
1.3666002653407556
-0.2917960675006306
0.28010988928051805
-0.07179676972449123
0.0
0.0
15
15
5
func6() got some positional-only arguments passed as keyword arguments: 'a'
func7() takes 2 positional arguments but 3 were given
50
name:Alice
age:25
city:New York
位置实参 arg1:10
位置实参 arg2:20
命名实参 named_arg:default
位置实参 arg1:10
位置实参 arg2:20
命名实参 named_arg:default

```

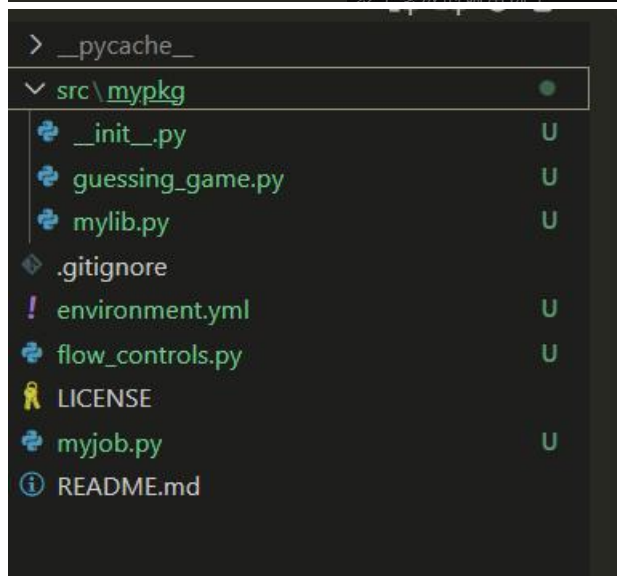
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL POP-UP

No problems have been detected in the workspace.

```

myjob.py 7 ...
0 print(mylib.calculate(operation="a
1 print(mylib.calculate(b=5, a=10, o
2
3 try:
4     print(mylib.func6(a=10, b=5))
5 except TypeError as e:
6     print(e)
7
8 try:
9     print(mylib.func7(10, 5, "subt
10 except TypeError as e:
11     print(e)
12
13 print(mylib.func8(4, 8, 18, 20))
14
15 mylib.func9(name="Alice", age="25"
16
17 tuple_args = (10, 20)
18 mylib.func10(*tuple_args)
19
20 list_args = (10, 20)
21 mylib.func10(*list_args)
22
23 mylib.func12(7, 8, 9)
24
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
problems have been detected in the workspace.
age:25
city:New York
位置实参 arg1:10
位置实参 arg2:20
命名实参 named_arg:default
位置实参 arg1:10
位置实参 arg2:20
命名实参 named_arg:default
位置实参 arg1:7
位置实参 arg2:8
命名实参 named_arg:9
> d:\gitcode\week06\myjob.py(54)<module>()
-> breakpoint()
(Pdb) l
49
50     list_args = (10, 20)
51     mylib.func10(*list_args)
52
53     mylib.func12(7, 8, 9)
54     -> breakpoint()
[EOF]
(Pdb) import wat
(Pdb) wat / mylib.func12
value: <function func12 at 0x000001C810B5CE00>
type: function
signature: def func12(arg1: str, arg2: int, named_arg: str = 'default'
"""
多个参数的调用例子

```



```

12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ pip install -e .
Looking in indexes: https://mirrors.tuna.tsinghua.edu.cn/pypi/web/simple
Obtaining file:///D:/gitcode/week06
Installing build dependencies ... done
Checking if build backend supports build_editable ... done
Getting requirements to build editable ... done
Installing backend dependencies ... done
Preparing editable metadata (pyproject.toml) ... done
Collecting openpyxl (from mypackage==0.0.1)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/c0/da/977ded879c29
b987245dc7c8506/openpyxl-3.1.5-py2.py3-none-any.whl (250 kB)
Collecting et-xmlfile (from openpyxl->mypackage==0.0.1)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/c1/8b/5fe2cc11fee4
18d852ae3cbba6a/et_xmlfile-2.0.0-py3-none-any.whl (18 kB)
Building wheels for collected packages: mypackage
  Building editable for mypackage (pyproject.toml) ... done
  Created wheel for mypackage: filename=mypackage-0.0.1-py3-none-any.whl size=7215 sha2
8891612d72929fcd157e54afaa36de5c56
  Stored in directory: C:\Users\12460\AppData\Local\Temp\pip-ephem-wheel-cache-j8vt77x
d478a849ee6b5131dc999f3d20017e117b
Successfully built mypackage
Installing collected packages: et-xmlfile, openpyxl, mypackage
Successfully installed et-xmlfile-2.0.0 mypackage-0.0.1 openpyxl-3.1.5
(week06)

```

```

12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python
Python 3.13.3 | packaged by conda-forge | (main, Apr 10 2025, 22:12:50) [MSC
v.1943 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import mypackage
Traceback (most recent call last):
  File "<python-input-0>", line 1, in <module>
    import mypackage
ModuleNotFoundError: No module named 'mypackage'
>>> import mypkg
Traceback (most recent call last):
  File "<python-input-1>", line 1, in <module>
    import mypkg
ModuleNotFoundError: No module named 'mypkg'
>>> import mypkg
Traceback (most recent call last):
  File "<python-input-2>", line 1, in <module>
    import mypkg
ModuleNotFoundError: No module named 'mypkg'
>>> import src
>>> import mypkg
Traceback (most recent call last):
  File "<python-input-4>", line 1, in <module>
    import mypkg
ModuleNotFoundError: No module named 'mypkg'
>>> import mypkg
Traceback (most recent call last):
  File "<python-input-5>", line 1, in <module>
    import mypkg
ModuleNotFoundError: No module named 'mypkg'
>>> quit()
(week06)

```

在文件夹下 import 一直无法找到 mypkg，只能通过切换至最终路径 import mylib，在后续的操作中也会出现无法找到 mypkg 的情况，询问豆包后只能通过建一个临时的路径来导入 mypkg

```

12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python
Python 3.13.3 | packaged by conda-forge | (main, Apr 10 2025, 22:12:50) [MSC
v.1943 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import sys
>>> print(sys.path)
['F:\\python\\conda\\envs\\week06\\python313.zip', 'F:\\python\\conda\\e
nvs\\week06\\DLLs', 'F:\\python\\conda\\envs\\week06\\Lib', 'F:\\python\\con
da\\envs\\week06\\Lib\\site-packages']
>>> sys.path.append('D:/gitcode/week06/src')
>>> print(sys.path)
['F:\\python\\conda\\envs\\week06\\python313.zip', 'F:\\python\\conda\\e
nvs\\week06\\DLLs', 'F:\\python\\conda\\envs\\week06\\Lib', 'F:\\python\\con
da\\envs\\week06\\Lib\\site-packages', 'D:/gitcode/week06/src']
>>> import mypkg
>>>

```

```
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python scripts/mypkg
F:\python\conda\envs\week06\python.exe: can't open file 'D:\\gitcode\\week06\\scripts\\mypkg': [Errno 2] No such file or
directory
(week06)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week06 (main)
$ python scripts/myjob.py
Traceback (most recent call last):
  File "D:\\gitcode\\week06\\scripts\\myjob.py", line 1, in <module>
    from mypkg import mylib # noqa: F401
    ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
ModuleNotFoundError: No module named 'mypkg'
(week06)
```