

# Python 导论第二次作业

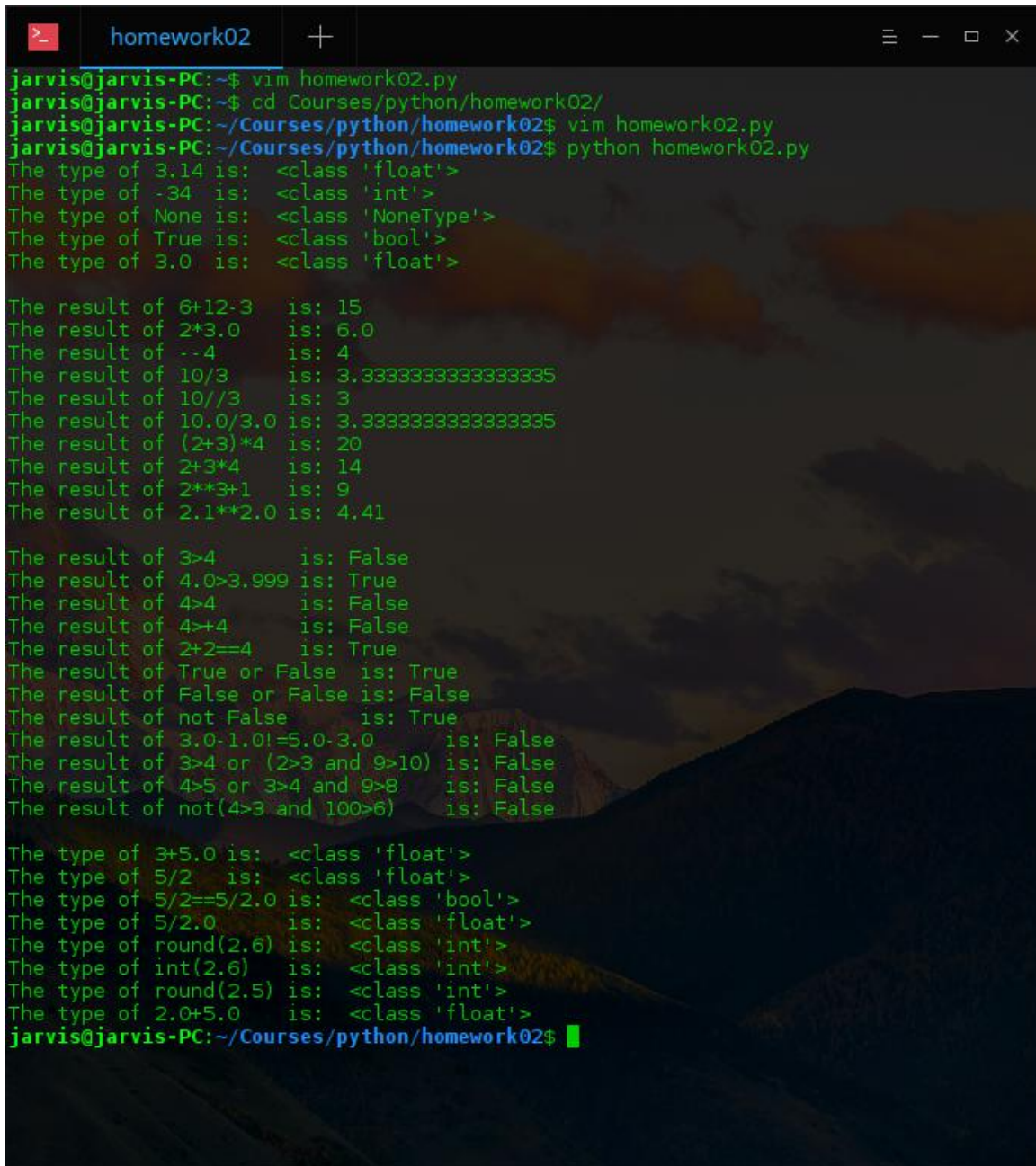
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## 1. 编程实现

本作业操作系统为 Linux Deepin, 代码编辑器为 Vim, Python 版本为 Anaconda3 中的 Python3.6.4, 通过在 Terminal 中调用 Python 命令来运行本次作业的代码文件 homework02.py 完成前四大题的编程实现; 并且通过在 Terminal 中直接调用 iPython 来打开其交互界面, 输入命令来实现第五大题的编程实现。代码运行结果如下图所示:

前四题代码运行结果如下图所示：



```
homework02 +
jarvis@jarvis-PC:~$ vim homework02.py
jarvis@jarvis-PC:~$ cd Courses/python/homework02/
jarvis@jarvis-PC:~/Courses/python/homework02$ vim homework02.py
jarvis@jarvis-PC:~/Courses/python/homework02$ python homework02.py
The type of 3.14 is: <class 'float'>
The type of -34 is: <class 'int'>
The type of None is: <class 'NoneType'>
The type of True is: <class 'bool'>
The type of 3.0 is: <class 'float'>

The result of 6+12-3 is: 15
The result of 2*3.0 is: 6.0
The result of --4 is: 4
The result of 10/3 is: 3.3333333333333335
The result of 10//3 is: 3
The result of 10.0/3.0 is: 3.3333333333333335
The result of (2+3)*4 is: 20
The result of 2+3*4 is: 14
The result of 2**3+1 is: 9
The result of 2.1**2.0 is: 4.41

The result of 3>4 is: False
The result of 4.0>3.999 is: True
The result of 4>4 is: False
The result of 4>+4 is: False
The result of 2+2==4 is: True
The result of True or False is: True
The result of False or False is: False
The result of not False is: True
The result of 3.0-1.0!=5.0-3.0 is: False
The result of 3>4 or (2>3 and 9>10) is: False
The result of 4>5 or 3>4 and 9>8 is: False
The result of not(4>3 and 100>6) is: False

The type of 3+5.0 is: <class 'float'>
The type of 5/2 is: <class 'float'>
The type of 5/2==5/2.0 is: <class 'bool'>
The type of 5/2.0 is: <class 'float'>
The type of round(2.6) is: <class 'int'>
The type of int(2.6) is: <class 'int'>
The type of round(2.5) is: <class 'int'>
The type of 2.0+5.0 is: <class 'float'>
jarvis@jarvis-PC:~/Courses/python/homework02$
```

第五题代码运行结果如下：

```
IPython: homework02 +
jarvis@jarvis-PC:~/Courses/python/homework02$ ipython
Python 3.6.4 |Anaconda, Inc.| (default, Jan 16 2018, 18:10:19)
Type 'copyright', 'credits' or 'license' for more information
IPython 6.2.1 -- An enhanced Interactive Python. Type '?' for help.

In [1]: a = 3

In [2]: print( a+2.0, type(a+2.0) )
5.0 <class 'float'>

In [3]: a = a + 1.0

In [4]: print( a, type(a) )
4.0 <class 'float'>

In [5]: a = 3

In [6]: print( b, type(b) )
-----
NameError                                Traceback (most recent call last)
<ipython-input-6-6f93649ae274> in <module>()
----> 1 print( b, type(b) )

NameError: name 'b' is not defined

In [7]: a == 5.0
Out[7]: False

In [8]: print( a, type(a) )
3 <class 'int'>

In [9]: b = 10

In [10]: c = b > 9

In [11]: print( c, type(c) )
True <class 'bool'>

In [12]: █
```

## 2. 代码附录

Homework02.py:

```
#*****
print("The type of 3.14 is: ",type(3.14))
print("The type of -34  is: ",type(-34))
print("The type of None is: ",type(None))
print("The type of True is: ",type(True))
print("The type of 3.0  is: ",type(3.0))
print()
#*****
print("The result of 6+12-3  is:", 6+12-3  )
print("The result of 2*3.0   is:", 2*3.0   )
print("The result of --4     is:", --4     )
print("The result of 10/3    is:", 10/3    )
print("The result of 10//3   is:", 10//3   )
print("The result of 10.0/3.0 is:", 10.0/3.0)
print("The result of (2+3)*4 is:", (2+3)*4 )
print("The result of 2+3*4   is:", 3+3*4   )
print("The result of 2**3+1  is:", 2**3+1  )
print("The result of 2.1**2.0 is:", 2.1**2.0)
print()
#*****
print("The result of 3>4      is:", 3>4      )
print("The result of 4.0>3.999 is:", 4.0>3.999)
print("The result of 4>4      is:", 4>4      )
print("The result of 4>+4     is:", 4>+4     )
print("The result of 2+2==4    is:", 2+2==4    )
print("The result of True or False is:", True or False )
print("The result of False or False is:", False or False)
print("The result of not False   is:", not False   )
print("The result of 3.0-1.0!=5.0-3.0   is:", 3.0-1.0!=5.0-3.0   )
print("The result of 3>4 or (2>3 and 9>10) is:", 3>4 or (2>3 and 9>10))
```

```
print("The result of 4>5 or 3>4 and 9>8      is:", 4>5 or 3>4 and
9>8  )
```

```
print("The result of not(4>3 and 100>6)      is:", not(4>3 and
100>6)  )
```

```
print()
```

```
#*****
```

```
print("The type of 3+5.0 is: ",type(3+5.0))
```

```
print("The type of 5/2   is: ",type(5/2   ))
```

```
print("The type of 5/2==5/2.0 is: ",type(5/2==5/2.0))
```

```
print("The type of 5/2.0      is: ",type(5/2.0      ))
```

```
print("The type of round(2.6) is: ",type(round(2.6)))
```

```
print("The type of int(2.6)   is: ",type(int(2.6)   ))
```

```
print("The type of round(2.5) is: ",type(round(2.5)))
```

```
print("The type of 2.0+5.0    is: ",type(2.0+5.0    ))
```

```
print("The type of 5*2==5.0*2.0 is: ",type(5*2==5.0*2.0))
```