

## First Steps in Python



### Objectives

#### *Beginning to work with Python*

- Setup Python working environment
- Execute simple instructions using the Python interpreter
- Implement simple programs using Python IDLE and execute them



### Setup Python working environment

- Download Python 3.6.x from <http://www.python.org/>
- Choose the Windows x86-64 executable installer
- Launch the executable file. Check "Add Python 3.5 to PATH" and then select "Customize installation".
- On the lab computers, use "C:\Temp\Python36" as the installing folder.
- For more instructions on Python installation:  
<http://www.youtube.com/watch?v=4Mf0h3HphEA>

### Using the Python interpreter

- IDLE = Integrated DeveLopment Environment
- Launch the IDLE from Start menu/Search Windows
- Try some simple instructions (see example below)
- Use the interactive mode programming

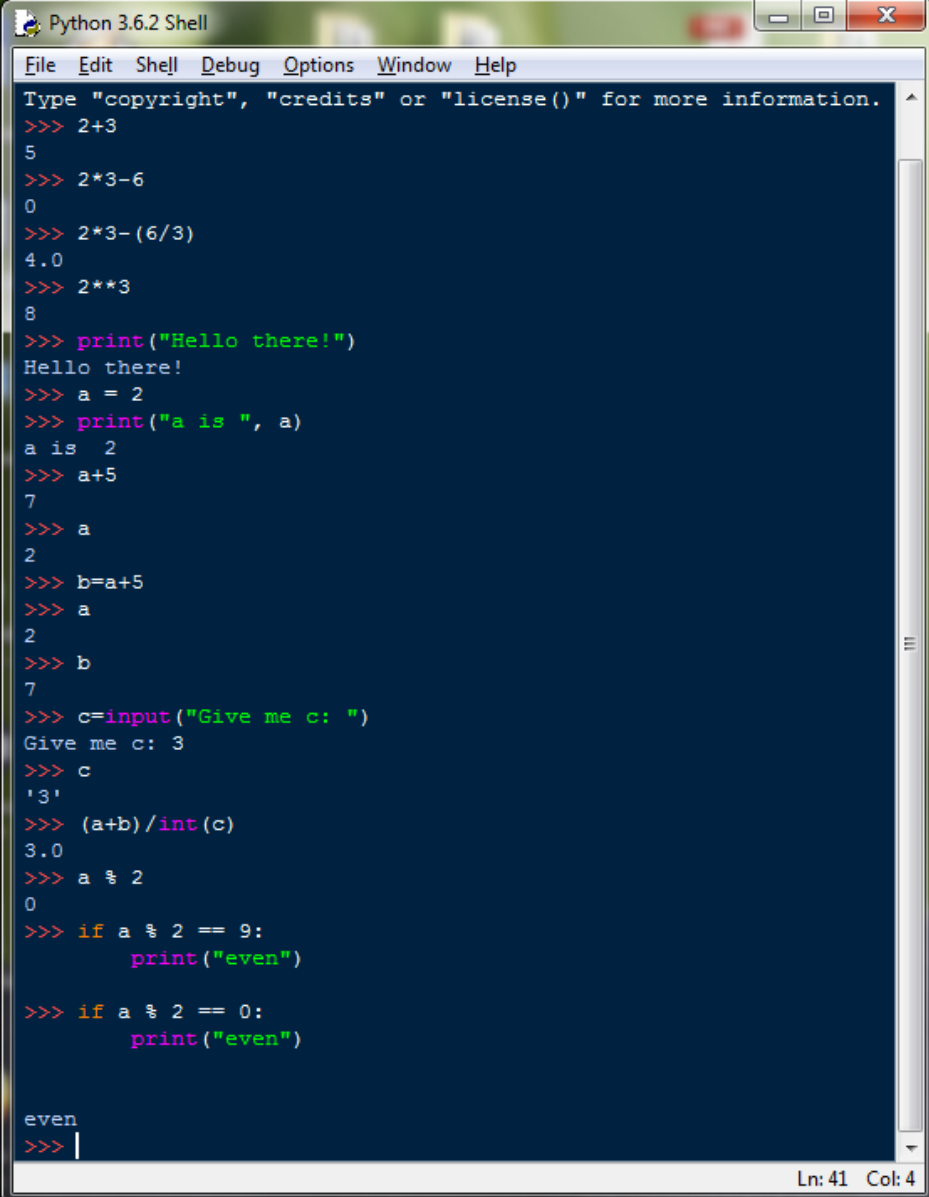
```
Python 3.6.2 Shell
File Edit Shell Debug Options Window Help
Python 3.6.2 (v3.6.2:5fd33b5, Jul 8 2017, 04:14:34) [MSC v.1900 32 bit
(Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>> 2+3
5
>>> print("Hello world!")
Hello world!
>>> |
```

- Use the scripting mode programming: *File -> New File...*

```
test.py - C:/Users/cami/Desktop/test.py (3.6.2)
File Edit Format Run Options Window Help
print("Hello!")
print("This is my first program.")
```

**Solve some simple problems**

- 1) Compute the sum of two given numbers.
- 2) Compute the product of the first  $n$  natural numbers.
- 3) Verify if a given number is perfect square.



```
Python 3.6.2 Shell
File Edit Shell Debug Options Window Help
Type "copyright", "credits" or "license()" for more information.
>>> 2+3
5
>>> 2*3-6
0
>>> 2*3-(6/3)
4.0
>>> 2**3
8
>>> print("Hello there!")
Hello there!
>>> a = 2
>>> print("a is ", a)
a is 2
>>> a+5
7
>>> a
2
>>> b=a+5
>>> a
2
>>> b
7
>>> c=input("Give me c: ")
Give me c: 3
>>> c
'3'
>>> (a+b)/int(c)
3.0
>>> a % 2
0
>>> if a % 2 == 9:
    print("even")
>>> if a % 2 == 0:
    print("even")
even
>>> |
```

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