INTRODUCTION TO PYTHON

by

Kiran.V. [@kiranvm]

Nakul.E [@NakulE]

INTRODUCTION TO PYTHON

- About Python
- Python CLI
    - Lists
    - Modules
    - Exception Handling
- Introduction To GUI Programming
    - GUI Frameworks
    - GTK
    - GTK Widgets
    - Glade
- References

Q: What Makes Python Different?

ANS: Lot Of Things

INSTALLATION

- MAC OS and LINUX users, Please Don't Bother.
- Windows Guys, Install it from

www.python.org

ABOUT PYTHON

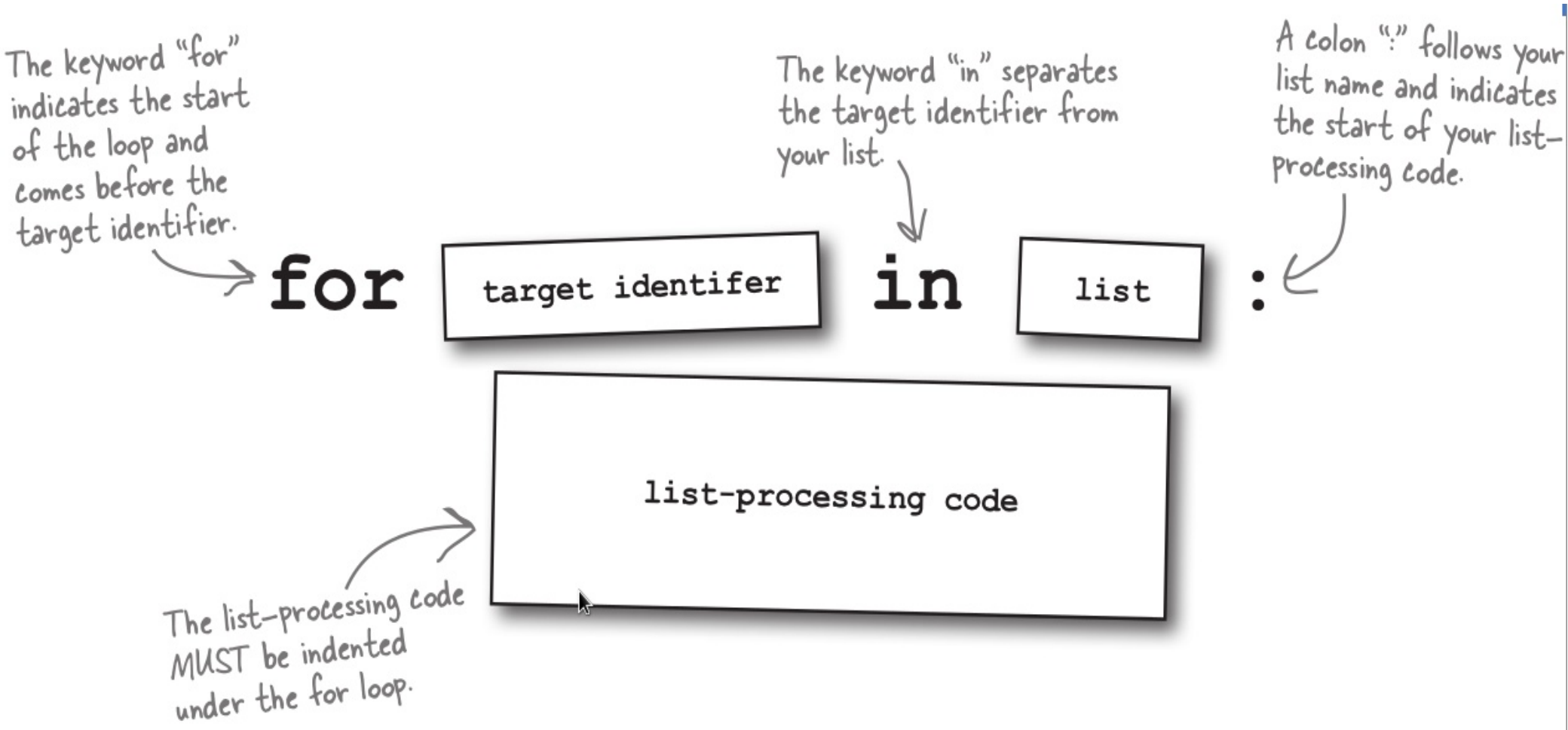
- Designed By Guido Van Rossum in 1991
- Web Applications, Softwares, Games, Mobiles etc
- Interpreted, Interactive, Object Oriented.
- Portable over Hardware and Software platforms.

LISTS

- *Easy to work with arrangement* of your data.

- Eg:

movies=[“if only”,”hachiko”,”the prestige”]


The keyword "for" indicates the start of the loop and comes before the target identifier.
The keyword "in" separates the target identifier from your list.
A colon ":" follows your list name and indicates the start of your list-processing code.
for
target identifer
in
list
:
list-processing code
The list-processing code MUST be indented under the for loop.

python™

When you use "while", you have to worry about "state information," which requires you to employ a counting identifier.

```
count = 0
while count < len(movies):
    print(movies[count])
    count = count+1
```

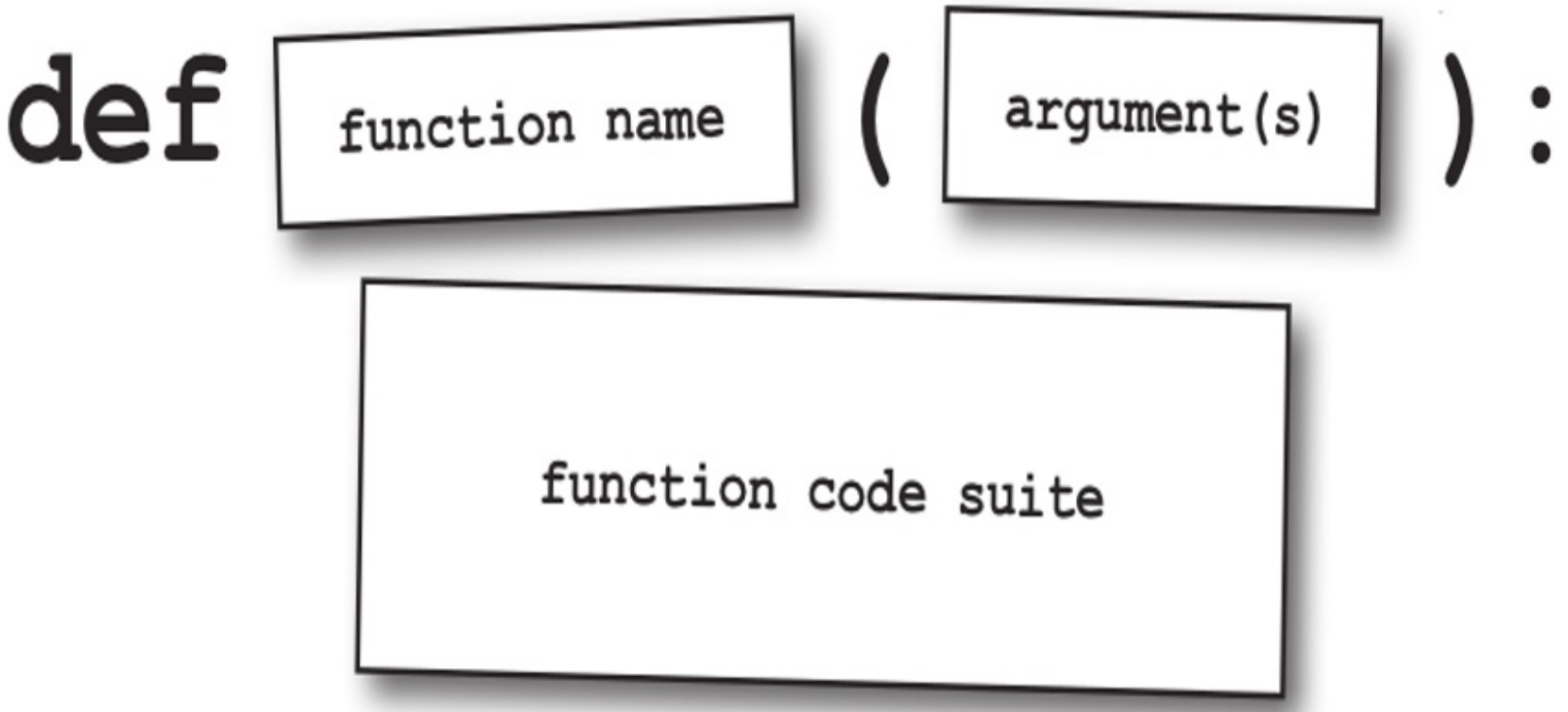
```
for each_item in movies:
    print(each_item)
```

When you use "for", the Python interpreter worries about the "state information" for you.

These while and for statements do the same thing.

python™

FUNCTIONS

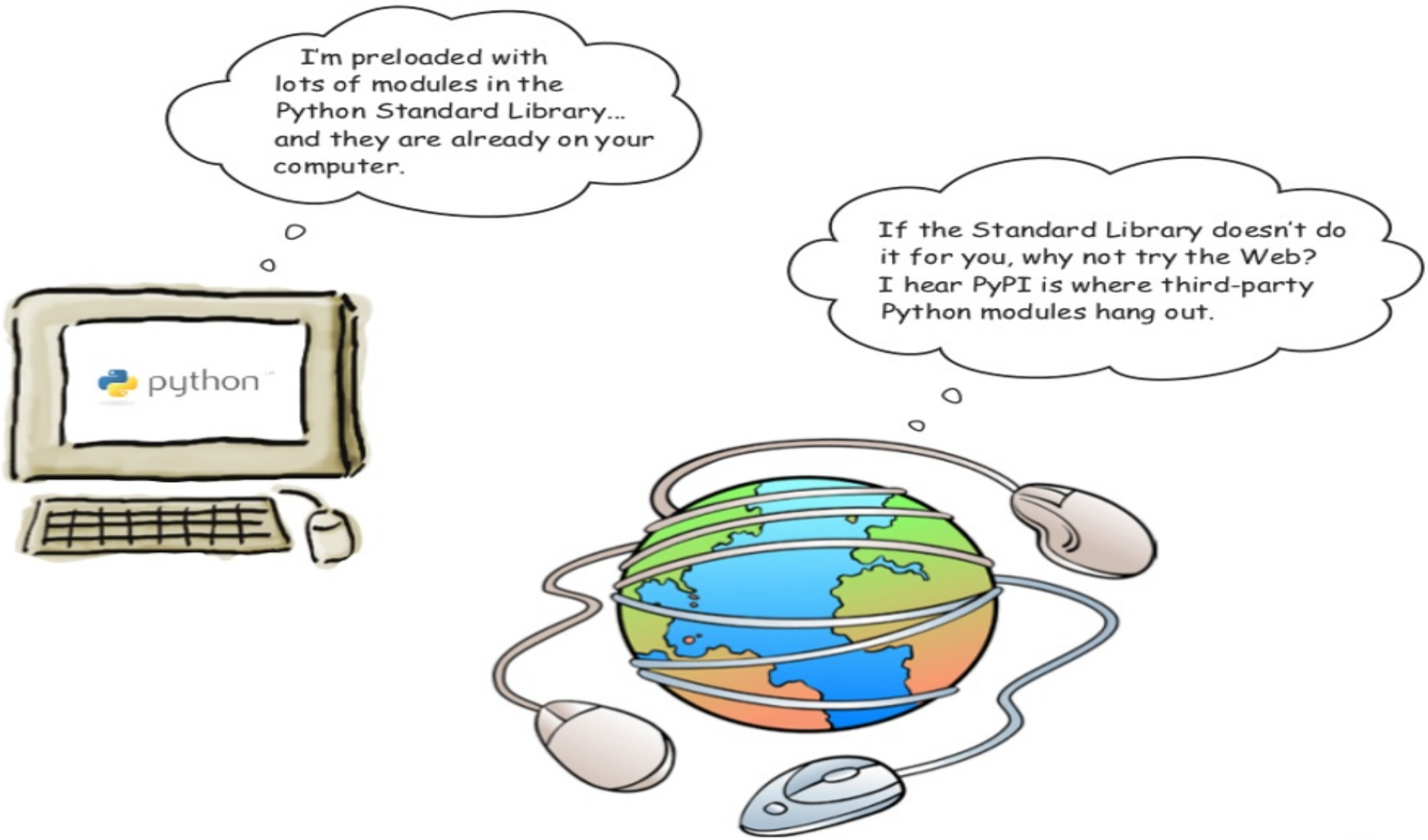


python™

MODULES

- Modules let you organize your code for optimal sharing.
- Simply a text file containing python code.

```
>>> Import random
```


I'm preloaded with lots of modules in the Python Standard Library... and they are already on your computer.
python
If the Standard Library doesn't do it for you, why not try the Web? I hear PyPI is where third-party Python modules hang out.

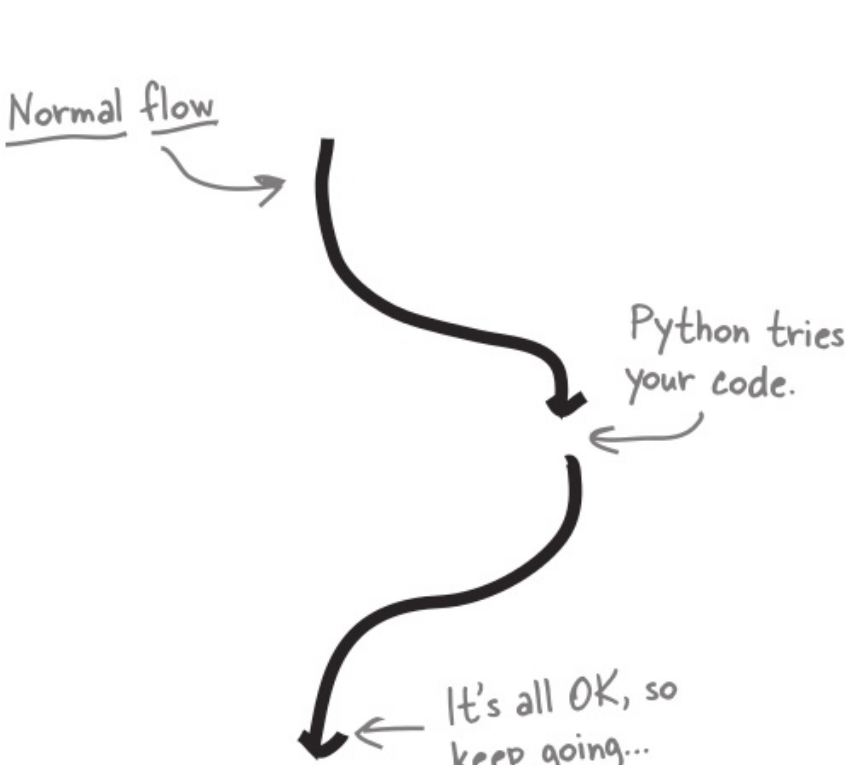
python™

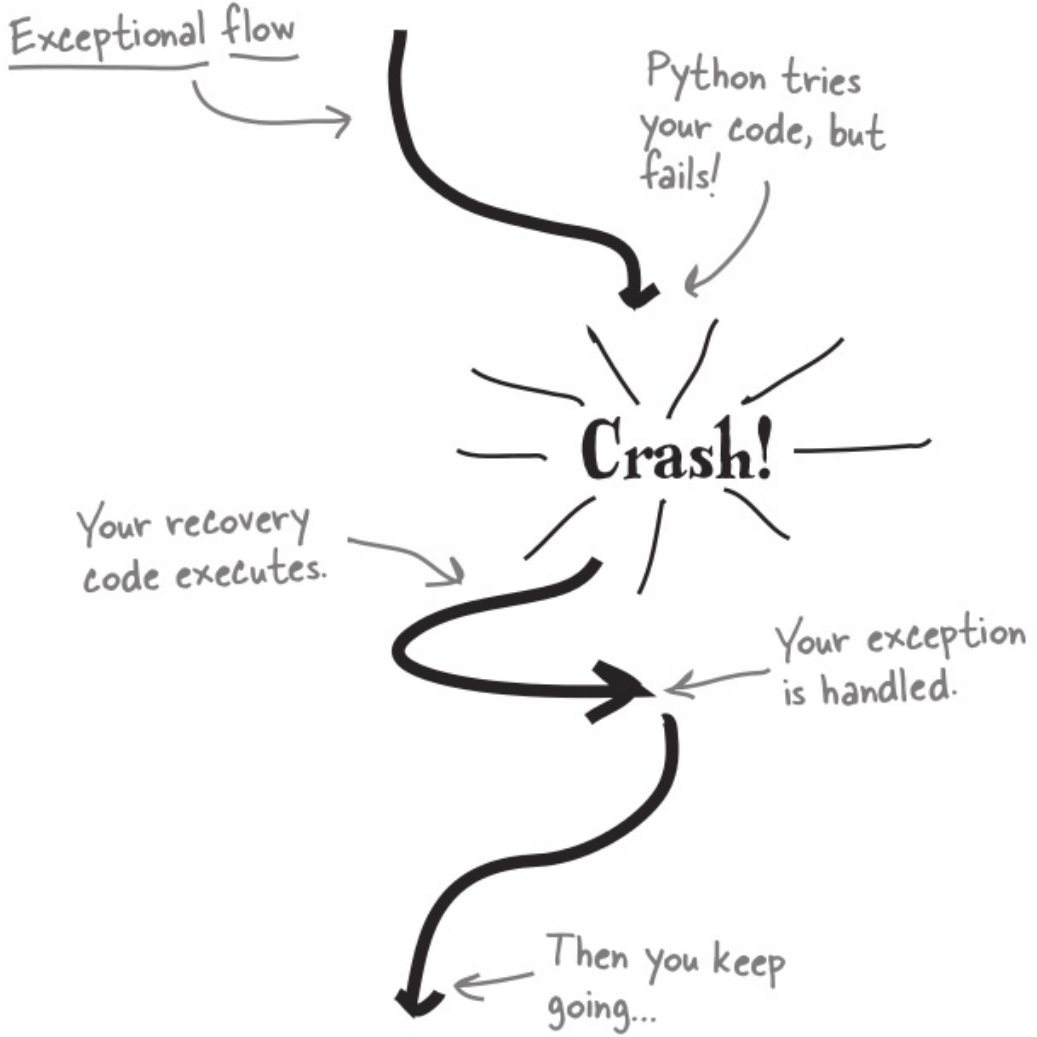
```
#! /usr/bin/env python

“”” example for using a module “””

Import random

Print random.randint(1,100)
```

EXCEPTION HANDLING

- Exceptions are Run-time Errors.
- Traceback is python's way of reporting errors.

```
try:
    your code (which might cause a runtime error)
except:
    your error-recovery code
```


Normal flow
Python tries your code.
It's all OK, so keep going...


Exceptional flow
Python tries your code, but fails!
Crash!
Your recovery code executes.
Your exception is handled.
Then you keep going...

python™

CREATIVE THINGS YOU SHOULD TRY!!

- Create a truth and dare game.
- Create your classmates birthday list
- Download entire results of your classmates
- Develop a simple game.

And much more...

THANK YOU !!