

Task: Introduction to Python Programming

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Introduction

Welcome to your training in Python Programming!

Please feel free to visit www.hyperiondev.com and log in to your Portal using the login details sent to you during registration. Here you will have access to the tools and methods that will help you throughout the course: know your tutor, view your current courses and progress and check whether your current task has been marked yet. For any queries regarding the course, help needed understanding the tasks or general comments, please contact us at help@hyperiondev.com.

Why Python?

Python is a powerful, widely used programming language. Unlike Java, Python is a more recent, efficient and arguably faster programming language. The syntax (way the code is written) is very similar to Java.





Get excited to learn such a popular and fun programming language!

A brief history of Python:

Python is named after the Monty Python comedy group. It was created by Benevolent Dictator For Life Guido Van Rossum in 1991, who now works for Dropbox. Van Rossum incidentally happens to be a big Monty Python's Flying Circus fan. His inspiration for Python stemmed from the desire to create a simple scripting language and his experience with the ABC programming language. ¹



¹Python History and Philosophy

ZEN OF PYTHON

Keep in mind Python's philosophy as you code.

```
>>> import this

The Zen of Python, by Tim Peters

Beautiful is better than ugly.

Explicit is better than implicit.

Simple is better than complex.

Complex is better than complicated.

Flat is better than nested.

Sparse is better than dense.

Readability counts.

Special cases aren't special enough to break the rules.

Although practicality beats purity.

Errors should never pass silently.

Unless explicitly silenced.

In the face of ambiguity, refuse the temptation to guess.
```

Not all languages can boast like Python:

Python is intuitive with a natural way of presenting code. Looking at languages like C++ and Java quickly flummoxes and scares the neophyte. Yet Python's succinctity and economy of language allows for speedy development and less hassle over useful tasks. This makes Python easy on the eyes and mind.

- The Hyperion Team

The instructions for your first Python Task are below as well as additional information. Before you get started we strongly suggest you start using Notepad++ to open all text files (.txt) and Python files (.py). Do not use the normal Windows notepad as it will be much harder to read. Simply right click a file and then select > Edit with Notepad++ to be able to read it. If you cannot see 'Edit with Notepad++' then you do not have it installed.



Instructions

First read **example.py**, open it using Notepad++ (Right click the file and select 'Edit with Notepad++'):

- example.py should help you understand some simple Python. Every task will have example code to help you get started. Make sure you read all of example.py and try your best to understand.
- You may run example.py to see the output. The instructions on how to do this are in the example.py file. Feel free to write and run your own example code before doing this Task to become more comfortable with Python.
- You are not required to read the entirety of Additional Reading.pdf, it is purely for extra reference.

Compulsory Task

Follow these steps:

- Create a new Python file in this Task folder called HelloWorld.py.
- Inside it, write Python code to take in a user's name using raw_ input and then print out their name.
- Also take in a user's age using the same method and print out their age.
- Finally print out a new line and the string(text) "Hello World!".

Things to look out for:

- 1. Make sure that you have installed and setup all programs correctly. You have setup Dropbox correctly if you are reading this, but Python or Notepad++ may not be installed correctly. <u>Click here</u> if you need to see the setup guide for Python again.
- 2. If you are not using Windows, please ask your tutor for alternative instructions.





Know your stats, Python is hot:

As of 2015, job demand for Python programmers is only growing (by 8.7%) while other IT Professional demand dips. In fact overall, Python boats the biggest yearly job demand increase (19%), also ranking highly and earning handsomely among developers! ²

From child's play to big business:

Not only can Python be used to program game consoles, robots and cameras making it simple enough for children to do, many big companies use it. Companies such as Google, Yahoo! and the Bank of America; which should speak volumes about the increasingly in demand language.

Python is on the web:

Python is a very appealing language of choice for web development. Sites such as Pinterest and Instagram make use of the versatility, rapidity and simplicity of Django (web development framework written in Python).

Even Dropbox was built using Python:

Dropbox must save massive amounts of files while supporting massive amounts of user growth. 99.9% of Dropbox code is written in Python!³ Using Python has helped Dropbox gain more than a hundred million users. Using only a few hundred lines of Python code, they were able to scale up massively in user numbers.⁴ Learn from Dropbox and use Python!

- The Hyperion Team



²Reasons To Learn Python

³⁶ Lessons From Dropbox - One Million Files Saved Every 15 Minutes

⁴How Did Dropbox Scale To 175M Users?

Still need help?

Just write your queries in your comments.txt file and your tutor will respond.

Task Statistics

Estimated time for completion: 1 hour self-study.

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Task Feedback link: <u>Hyperion Development Feedback</u>.

