Hyperion Development

Task: Your First Computer Program

www.hyperiondev.com

Introduction

Welcome to Your First Computer Program Task!

In this task, you are introduced to the Python programming language. Python is a widely used, high-level programming language and is consistently ranked in the top 10 most popular programming languages as measured by the TIOBE Programming Community Index. Many familiar organizations make use of Python, such as Wikipedia, Google, Yahoo!, and NASA as well as Reddit, which is written entirely in Python.

This task is a gentle introduction to the programming language where you will be asked to create a simple program and in doing so become familiar with the structure of a Python program.

Connect with your mentor

CONNECT

Remember that with our courses - you're not alone! You can contact your mentor to get support on any aspect of your course.

The best way to get help is to login to **www.hyperiondev.com/support** to start a chat with your mentor. You can also schedule a call or get support via email.

Your mentor is happy to offer you support that is tailored to your individual career or education needs. Do not hesitate to ask a question or for additional support!

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]

[1] Python History and Philosophy

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.

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 succinctly and economy of language allows for speedy development and less hassle over useful tasks.

This makes Python easy on the eyes and mind.

ZEN OF PYTHON

>> 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.

There should be one-- and preferably only one --obvious way to do it.

Although that way may not be obvious at first unless you're Dutch.

Now is better than never.

Although never is often better than *right* now.

If the implementation is hard to explain, it's a bad idea.

If the implementation is easy to explain, it may be a good idea.

Namespaces are one honking great idea -- let's do more of those!

A note from Masood…

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 boasts the biggest yearly job demand increase (19%), also ranking highly and earning handsomely among Developers!

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! 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. Learn from Dropbox and use Python!

- **Masood Gool**

Instructions

Before you get started we strongly suggest you start using Notepad++ or IDLE 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.

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

- 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 inside the file. Feel free to write and run your own example code before doing Task 1 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 folder called "HelloWorld.py."
- Inside it, write Python code to take in a user's name using raw_ input and then print out the name.
- Also take in a user's age using the same method and print out their age.
- And finally print out a new line and the string "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.
2. If you are not using Windows, please ask your mentor for alternative instructions.

Give your thoughts..

Hyperion strives to provide internationally-excellent course content that helps you achieve your learning outcomes. Think the content of this task, or this course as a whole, can be improved or think we've done a good job?

Click here to share your thoughts anonymously.