

Task 3:



Welcome to Task 3. In this task, you will learn about data structures in Python and in programming.

Instructions:

Read **example.py**. Open it using **Notepad++** (Right click the file and select 'Edit with Notepad++') If you do not have **Notepad++** installed please install it using the instructions located at www.rmoola.com/pythonlessons.html.

- **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 3 to become more comfortable with Python.
- You are not required to read the entirety of **AdditionalReading.pdf**, it is purely for extra reference.

Compulsory exercise to finish Task 3:

Now once you have read and completely understand **example.py**, try write a Python program that takes in a user input as a String. While the String is not "John", add every string entered to a list until "John" is entered. Then print out the list.

This program basically stores all incorrectly entered strings in a list where "John" is the only correct string. Save this program as **John.py** in this folder and a teacher will give you the next Task if **John.py** is correct.

Example program run (what should show up in the python console when you run it):

```
Enter your name : <user enters Tim>
Enter your name : <user enters Mark>
Enter your name: <user enters John>
Incorrect names: ['Tim', 'Mark']
```

BONUS Optional Challenge:

Edit the above program to allow the user to enter an integer after they enter the name. This integer defines how many 'tries' the user will get to enter the right name. If the user exceeds the number of tries, the program must stop.

Need some help?

Firstly, make sure that you have installed and setup all programs correctly. You have setup **Dropbox** correctly if you are reading this, but Python may not be installed correctly.

Visit www.rmoola.com/pythonlessons.html for a complete guide on how to setup the software.

Make sure you have **Python version 2.7** installed as per the instructions and not an older nor earlier version of Python.

Please refer to the pdf file **AdditionalReading.pdf** if you would like more examples of Python coding and explanations.

If you having problems understanding example.py or how to complete Task 3, please contact students@hyperiondev.com. One on one help sessions are available over the internet or in person in Westville, Durban or UKZN (Westville Campus) and these can be arranged by contacting us. **We employ paid teachers who are here to help you!**

If there are any specific areas that are unclear or areas that require additional information:

Please add to 'What do you want to learn.txt' and one of our teachers will assist you once they read your request.

A peek ahead:

Task 4: Reading, writing and creating files with Python. Saving input on a hard drive. Defining functions/methods in Python.

