

Intro to Programming for Data Analytics

Module Title:	Intro to Programming for Data Analytics.
Assignment Type:	Individual Practical Assignment.
Project Title:	Gangster Stage Name.
Project Date:	October 2020.
Assignment Compiler:	Amilcar Aponte.
Weighting:	40%
Due Date:	7 th November 2020 @ 23:59.
	Late submissions will be accepted up to 5 days after the deadline. All late submissions are subject to a penalty of 10% of the mark awarded.
Method of Submission:	Moodle Submission.
	No email submission will be accepted.

Module Learning Outcomes Assessed

- MLO1. Demonstrate knowledge of fundamental programming concepts.

Assignment Introduction

You have been task to design and implement a program that will convert any number of regular names into stage names for the user.

System Requirements

- Your program must ask the user how many stage names they want to create.
- Then, the program should allow the user to type in as many regular names as defined in the previous step.
- The program will automatically manipulate all user inputs and assign an integrated stage name following the set of rules specified below.
- The system should also output the original name followed by the new generated stage name.
- The format of the stage names should be:
 - Capital first initial
 - Random add on name
 - Last name in upper case
 - First name in lower case
 - Random add on name
- In all cases the program should make sure that the user input has the correct format.
 - Integer numbers when it comes to the number of stage names to be created.
 - Full name (in the format "firstname lastname") when it comes to all consecutive regular names.
- Your program should make use of data structures to store the inputs and outputs, as well as flow control structures and loops.
- Make sure to use multiple functions to organise your code.

Notes

- Sample input and output
 - Input: Bat Man
 - Output: B. Waka-Waka MAN bat Sonzon
- You are allowed to use other tools apart from the ones seen in class, as long as it is your own code.
- Try to keep it simple. Planning your program before start coding is part of your assessment.
- Comment your code!!
- Plagiarism will not be tolerated. All work must be your own. If you used some snippet of code from an external source, make sure that you reference it correctly inside your code.
- In any situation, the lecturer is entitled to call you in for further explanation of your code.
- **Your code must run as no debugging will be done.**

Deliverables

You must submit through Moodle two separate files:

- Your python source code in format .py.
- One page PDF document that includes the reasoning behind your design choices.

Marking Scheme Summary

Description	Weighting
Program work correctly and the rules of stage names are correctly followed.	50
Correct data structures have been used.	15
Validations have been implemented.	10
Program is correctly commented and well structured	15
Documentation includes sensible reasoning for the design choices.	10
TOTAL	100