

# Data Insight

Knowledge for Insight from Data

## DATA SCIENTIST PROGRAM

### Assignment - Python Concepts for Data Science

You have been learning data science for at least a month. You were introduced to python; the most used language for data science by practicing data scientists. Python is a general purpose language so it is not just for data science. It can be used for web development, mobile application, game development, et cetera.

You've come across many concepts in python that are important for data analysis, and as you will soon appreciate that are also important for data science. In this assignment, you will give a tutorial on some of these concepts that, in your opinion, are very important for dealing with data using python.

Explain in detail at least two concepts. Give coding examples to illustrate your point. Your code should be written in separate Jupyter notebooks. Choose one concept from the list below and the others (not from the list) your choice.

1. Functions
2. Classes
3. Positional and keyword arguments
4. \*args and \*\*kwargs
5. Lists
6. Tuples
7. Dictionaries
8. Sets
9. List comprehension
10. Lambda expressions

Upload your notebooks to your GitHub repository.

Using each notebook, write a blog post for each concept, explaining your code and how the concept will generally function within a larger program. The blog post should be written [here](#) with code from your notebook embedded (use the code snippet option instead of taking screenshots of your code).

Submit the links to your notebooks and blogs [here](#). Submission is due on or before Oct. 06, 2021.