

Knowledge for Insight from Data

## DATA SCIENTIST PROGRAM

## **Assignment - Writing Simple Apps with Python**

Currently, you are being introduced to the python programming language. In this assignment, you will wield the power of python to create simple applications.

Write two python programs, with each accomplishing a specific task using Jupyter notebooks or otherwise. Choose one task from the list below and a second task of your choice (not from the list).

- 1. Count character occurrences in a given word, phrase or sentence.
- 2. Convert roman numbers to decimals.
- 3. Body Mass Index (BMI) calculator.
- 4. Password generator from first names.
- 5. Acronym generator from long words or phrases.
- 6. Email splitter for separating the username and domain name.
- 7. Email verifier, which checks an email for the @ symbol.
- 8. Convert temperature in Fahrenheit to Celsius.
- 9. Currency converter.
- 10. Simple interest calculator.
- 11. Arithmetic calculator.
- 12. Compound interest calculator.

Upload your notebooks to your GitHub repository.

Write a blog for each application, explaining your code and the functionality of your program. Your blog should be written here with code from your notebook embedded (**Do not embed code images!** See the options you have for embedding your code).

Submit the links to your notebooks and blogs here.