

Tutorial 2

Data Analysis and Visualization using Pandas and Seaborn

BT3017

Due date: 31st Jan 2022 (Monday) 1200 hrs (i.e. noon)

Semester 2, AY21/22, School of Computing, National University of Singapore

IMPORTANT:

For this tutorial, you are supposed to submit your project file to LUMINUS.

Instruction for submission:

- *Create a folder using the following naming convention:*

StudentNumber_yourName_Tut2

- *Follow the submission instructions at the end of this document. Zip your folder. Name your zip file using the following convention:*

StudentNumber_yourName_Tut2.zip

For example, if your student number is A1234567B, and your name is Chow Yuen Fatt, for this tutorial, your file name should be A1234567B_ChowYuenFatt_Tut2.zip

- *Submit the zip file in the “Tutorial-2 Submit Here” folder in Luminus.*

Note: you should not need to pay for the website recommended.

Download a dataset containing 120 years of Olympic history from the following link (note: you should not need to pay for downloading this dataset):

<https://www.kaggle.com/heesoo37/120-years-of-olympic-history-athletes-and-results>

You should see two files: *athlete_events.csv* and *noc_regions.csv*

Use the above datasets that you downloaded from the above link for this tutorial.

Examine the datasets. Answer the following questions:

- (a) What are the top three favourite sports of yours?
- (b) What are the top three questions you want to ask regarding the data related to at least one of these three sports?
- (c) Using Pandas and Seaborn, analyze and visualize the data to help answer your three questions raised in Step (b) above.
- (d) Submission instructions:
 - i. Consolidate your answers to (a), (b), (c) above in a PDF file.
 - ii. Put all your codes in a Python file that is runnable on its own. You can also submit in Jupyter format.
 - iii. Put the datafiles in the same directory as your code.