Ateneo de Manila University
Department of Quantitative Methods and Information Technology

Certificate of Authorship

Instructions

- Accomplish the document completely
- Save the document as a .pdf file with the following name format:
  <IDNumber>_<RequirementTitle>_COA (e.g. 12345_Assignment1_COA)
- Attach this document to each course requirement submission unless otherwise specified by
  the Course Instructor

Certification

I hereby certify that the submission described in this document abides by the
principles stipulated in the student handbook.

I further certify that I am the author of this submission and that any assistance I
received in its preparation is fully acknowledged and disclosed in the documentation.

I have also cited all sources from which I obtained data, ideas, or words that are
directly copied or paraphrased in this document. Sources are properly credited according
to accepted standards for professional publication.

I am aware that any potential case of plagiarism or cheating (similar code) regarding
my submission merits a 0 for the requirement and a disciplinary case filed to the Discipline
Committee of the Loyola Schools.

Sources:

- https://pandas.pydata.org/docs/reference/api/pandas.DataFrame.pivot_table.html
- https://stackoverflow.com/questions/12680754/split-explode-pandas-dataframe-string-entry-to-separate-rows

Student and Course Information

Course Code & Section	ITMGT 25.03-H
Course Instructor	Mr. Ataiza
Student's Full Name	John Lloyd P. Balaong
Signature	*John Balaong*

Certificate of Authorship

Student and Course Information

Course Code & Section	ITMGT 25.03-H
Course Instructor	Mr. Ataiza
Student's Full Name	John Lloyd P. Balaong
Signature	

Certificate of Authorship

Sources (cont.)

Student and Course Information

Course Code & Section	ITMGT 25.03-H
Course Instructor	Mr. Ataiza
Student's Full Name	John Lloyd P. Balaong
Signature	