

**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**

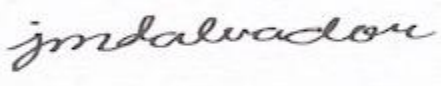
I hereby certify that the submission described in this document abides by the principles stipulated in the student handbook.

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.

**Student and Course Information**

<b>Course Code &amp; Section</b>	ITMGT 25.03-C
<b>Course Instructor</b>	Joe Illagan
<b>Student's Full Name</b>	Jose Miguel Salvador
<b>Signature</b>	

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**Sources (APA Format):**

Formal References (Used Functions in the Code):

BENYBENY . (1969, January 1). *How to use FILLNA function in pandas?* Stack Overflow.

Retrieved July 25, 2022, from

<https://stackoverflow.com/questions/68258207/how-to-use-fillna-function-in-pandas>

GeeksforGeeks. (2020, July 2). *Get month from date in Pandas - Python.*

GeeksforGeeks. Retrieved July 25, 2022, from

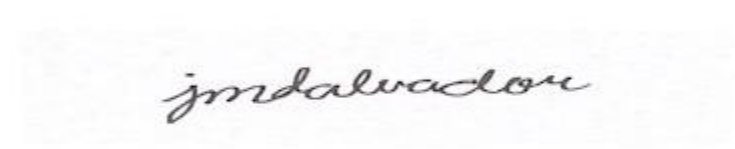
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GeeksforGeeks. (2020, July 28). *How to create a pivot table in python using pandas?*

GeeksforGeeks. Retrieved July 25, 2022, from

<https://www.geeksforgeeks.org/how-to-create-a-pivot-table-in-python-using-pandas/>

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**Sources (cont.)**

GeeksforGeeks. (2018, September 17). *Python: Pandas dataframe.where()*.

GeeksforGeeks. Retrieved July 25, 2022, from

<https://www.geeksforgeeks.org/python-pandas-dataframe-where/>

W3 Schools. (n.d.). *Python string split() method*. W3 Schools. Retrieved July 25, 2022,

from [https://www.w3schools.com/python/ref\\_string\\_split.asp](https://www.w3schools.com/python/ref_string_split.asp)

YouTube. (2015). *Solve Linear Equations with Python*. YouTube. Retrieved July 25,

2022, from <https://www.youtube.com/watch?v=44pAWI7v5Zk>.

**Also got help from:**

- Modules 1 to 5 in Canva
- Consultations from professor and classmates

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