Ateneo de Manila University Department of Quantitative Methods and Information Technology

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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.

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Sources

- BradleyBradley 1, Dan AllanDan Allan 32.4k66 gold badges6868 silver badges6262 bronze badges, Pietro BattistonPietro Battiston 7, jezraeljezrael 740k8080 gold badges11721172 silver badges11141114 bronze badges, yoonghmyoonghm 3, TimboTimbo 3111 bronze badge, Bharat SahuBharat Sahu 2111 bronze badge, & Ben2018Ben2018 39822 silver badges99 bronze badges. (1960, December 1). Pandas: How do I split text in a column into multiple rows? Stack Overflow. Retrieved July 9, 2022, from https://stackoverflow.com/questions/17116814/pandas-how-do-i-split-text-in-a-column-into-multiple-rows
- Data Independent. (2022, January 25). Pandas bar plot dataframe.plot.bar(). Data Independent. Retrieved July 16, 2022, from https://dataindependent.com/pandas/pandas-bar-plot-dataframe-plot-bar/
- Dayanand, T. (2020, June 9). *Pivot tables-data aggregation tool in Python*. Medium. Retrieved July 13,
 - $https://towards datascience.com/pivot-tables-cross-tabulation-data-aggregation-tools-in-python-dd6791dbe3c\ d$
- How to use split in Python. Net Informations. (n.d.). Retrieved July 9, 2022, from http://net-informations.com/python/file/split.htm
- Katiyar, P. (2019, January 21). Split a column in Pandas dataframe and get part of it. GeeksforGeeks.
 Retrieved July 9, 2022, from

https://www.geeksforgeeks.org/split-a-column-in-pandas-dataframe-and-get-part-of-it/

Student and Course Information

Course Code & Section	ITMGT 20.05 - H
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Student's Full Name	Angelina Clarissa G. Perez
Signature	

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Sources (cont.)

- Krunal. (2022, March 15). How to transpose matrix in python. AppDividend. Retrieved July 14, 2022, from https://appdividend.com/2022/03/15/pandas-dataframe-transpose/
- List of named colors#. List of named colors Matplotlib 3.5.2 documentation. (n.d.). Retrieved July 16, 2022, from https://matplotlib.org/stable/gallery/color/named colors.html
- Nnk. (2022, January 12). Pandas apply() with Lambda examples. Spark by Examples. Retrieved July 11, 2022, from https://sparkbyexamples.com/pandas/pandas-apply-with-lambda-examples/%C2%A0
- Pandas. (n.d.). Pandas.datetimeindex¶. pandas.DatetimeIndex pandas 1.4.3 documentation. Retrieved July 10, 2022, from https://pandas.pydata.org/docs/reference/api/pandas.DatetimeIndex.html
- Pandas.dataframe.apply¶. pandas.DataFrame.apply pandas 1.4.3 documentation. (n.d.). Retrieved July 12, 2022, from https://pandas.pydata.org/docs/reference/api/pandas.DataFrame.apply.html 4
- Pandas.dataframe.drop_duplicates¶. pandas.DataFrame.drop_duplicates pandas 1.4.3 documentation. (n.d.). Retrieved July 10, 2022, from
 - https://pandas.pydata.org/docs/reference/api/pandas.DataFrame.drop_duplicates.html
- Pandas.dataframe¶. pandas.DataFrame pandas 1.4.3 documentation. (n.d.). Retrieved July 17, 2022, from https://pandas.pydata.org/docs/reference/api/pandas.DataFrame.html
- Python string isdigit(). Programiz. (n.d.). Retrieved July 12, 2022, from https://www.programiz.com/python-programming/methods/string/isdigit
- PythonEnthusiastPythonEnthusiast 15.8k4141 gold badges122122 silver badges244244 bronze badges, Martijn Pieters •Martijn Pieters 972k269269 gold badges38313831 silver badges32023202 bronze badges, Snoop CattSnoop Catt 1, shahar_mshahar_m 3, BakuriuBakuriu 93.2k2020 gold badges183183 silver badges220220 bronze badges, AbhijitAbhijit 59.4k1616 gold badges122122 silver badges196196 bronze badges, prodyteprodyte 4922 bronze badges, Leroy ScandalLeroy Scandal 13444 bronze badges, M C AkashM C Akash 1111 bronze badge, & Fernando Pascoal GomesFernando Pascoal Gomes 13255 bronze badges. (1961, July 1). How to convert 'false' to 0 and 'true' to 1? Stack Overflow. Retrieved July 13, 2022, from https://stackoverflow.com/questions/20840803/how-to-convert-false-to-0-and-true-to-1%C2%A0
- Shubham, R. (2019, March 27). Python: Pandas series.str.extract(). GeeksforGeeks. Retrieved July 10, 2022, from https://www.geeksforgeeks.org/python-pandas-series-str-extract/
- Trying_hardTrying_hard 8, Steven GSteven G 14.8k77 gold badges4848 silver badges7272 bronze badges, SaurabhSaurabh 6, Gazala MuhamedGazala Muhamed 1, Demetri PananosDemetri Pananos 6, jaredjared 45144 silver badges99 bronze badges, xxyjoelxxyjoel 45855 silver badges66 bronze badges, BENYBENY 301k1919 gold badges149149 silver badges208208 bronze badges, YnjxsjmhYnjxsjmh 19.5k33 gold badges2020 silver badges4242 bronze badges, Jorge TorresJorge Torres 28133 silver badges22 bronze badges, & not a robotnot a robot 3. (1964, April 1). How do I pandas group-by to get sum? Stack Overflow. Retrieved July 11, 2022, from
 - https://stackoverflow.com/questions/39922986/how-do-i-pandas-group-by-to-get-sum%C2%A0
- Zverkova, A. (2021, February 12). 8 python Pandas value_counts() tricks that make your work more
 efficient. Re-thought. Retrieved July 15, 2022, from https://re-thought.com/pandas-value_counts/

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