

SIT112 - TASK COMPLETION REPORT

Important note 1: Please **do not** include Python code in this report. It would be acceptable though to make brief references to function names or different parts of the task's notebook when needed.

Important note 2: Please **do not** leave any response field empty; if not applicable, enter NA.

1. TASK SUMMARY

TASK NAME (ABBREVIATION)	YOUR NAME (STUDENT ID)	YOUR DEAKIN EMAIL
Pass Task P3	Jason Mark Vellucci (221437402)	jvellucci@deakin.edu.au

2. TASK DESCRIPTION

ITEM	RESPONSE
What was the objective(s) of the task?	The objective of this task was again to prepare the avocado data frame for graphing/visualization.
What kind of data did you work with?	One data set (Avocado sales data) was used. It was shaped in various ways as needed.
Briefly describe the data science task you worked on.	After shaping the data for each requirement, visualization of the data was achieved by generating various types of graphs. These graphs included scatter plots, categorical plots and bar plots.

3. TECHNICAL SKILLS

ITEM	RESPONSE
What technical skills did you use during the task?	Data preparation & shaping (melting, grouping & aggregate operations), reading external data into the development environment, utilization of data science packages (pd, sns)
list any challenges or obstacles you faced while working on the task and how you overcame them.	The cell that asked for a grouping of regions (TotalUS & two stand-alone regions), I used AI/the solution document to achieve this. I studied the solution and learnt from this that the 'catplot()' method's 'hue' param simultaneously groups and colours by the provided 'field' arg.

4. DATA CLEANING AND PREPARATION (ENTER NA WHEN NOT APPLICABLE)

ITEM	RESPONSE
What steps did you take to clean and prepare the data?	No cleaning was done in this task, even though there was data that was overlapping when grouping regions.
Did you encounter any issues with the data during this process? How did you address these issues with the data?	There were no issues encountered that hindered task completion.

5. DATA ANALYSIS (ENTER NA WHEN NOT APPLICABLE)

ITEM	RESPONSE
How did you analyze the data?	By utilizing the various visual graphs generated with the SNS (Seaborn) package, various insights were gained.
Did you use any visualization techniques to better understand the data?	Yes. Scatter plots and bar plots were generated with the avocado data.
What insights did you gain from this analysis?	<p>The following insights were gained:</p> <ul style="list-style-type: none"> • Avocado sales were highest in the year 2017. • There did not seem to be an immediately obvious correlation between the 'Average Price' of avocados and the 'Total Bags' sold. • The 'West' of the USA made up a sizeable portion of Avocado sales in all years. • The price - volume correlation indicated typical results of supply-and-demand. The scatter plot showed the highest prices were when volume was low.

6. BASIC REQUIREMENTS FOR THE TASK

ITEM	RESPONSE (YES/NO)
Are you confident to execute the Python code in this task and explain the output?	Yes
Are you confident to explain what each line of code does and how it contributes to the solution(s)?	Yes
Are you confident to rewrite or modify the code after completing this task? <ul style="list-style-type: none"> • For pass tasks: with guidance, no time limit. • For credit tasks: with limited guidance, no time limit. • For distinction tasks: independently, no time limit. • For high distinction tasks: independently, in a limited time. 	Yes

7. CODE ATTACHMENT (NOT APPLICABLE TO THE PASS TASKS – ENETER NA)

ITEM	RESPONSE (YES/NO/NA)
Have you attached the notebook file that contains your solutions (Python code) for this task?	YES
Have you executed all the cells in your attached notebook and ensured there is no error? <i>Please note your submission will not be flagged as complete if your attached notebook contains any error.</i>	YES

8. VIDEO ATTACHMENT (NOT APPLICABLE TO THE PASS/CREDIT TASKS: NA)

ITEM	RESPONSE (THE VIDEO LINK/NA)
Provide the link to the video recording that presents your completed task. This is only for Distinction and High Distinction tasks. Enter NA for Pass/Credit tasks.	NA

9. ACKNOWLEDGEMENT

BY SUBMITTING THIS REPORT, I ACKNOWLEDGE THAT:

- MY RESPONSES ARE ACCURATE AND ARE MY OWN WORDS.
- I HAVE MET ALL THE BASIC REQUIREMENTS OF THE TASK (LISTED IN SECTION 6).
- I HAVE READ AND FULLY UNDERSTOOD THE ASSESSMENT GUIDELINE OF THE UNIT.
- THIS REPORT DOES NOT EXCEED 3 PAGES.
- THIS REPORT DOES NOT INCLUDE CODE EXCEPT BRIEF REFERENCES TO FUNCTION NAMES OR DIFFERENT PARTS OF THE TASK'S NOTEBOOK.
- MY SUBMISSION DOES NOT CONTAIN ANY CREDENTIALS (E.G., PASSWORD, API KEY, ETC) OR PERSONAL INFORMATION.

IMPORTANT NOTE 3: IF YOU HAVE ANSWERED NO TO ANY OF THE QUESTIONS IN SECTIONS 6, PLEASE RECONSIDER SUBMITTING YOUR REPORT; ASK HELP FROM YOUR TUTOR.

ADD YOUR NAME AND SIGNATURE HERE: JASON MARK VELLUCCI