

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
Credit task c2	jasveena (224001588)	S224001588@deakin.edu.au

2. TASK DESCRIPTION

ITEM	RESPONSE
What was the objective(s) of the task?	The objective of this task was to analyse the avocado dataset, perform various transformations on the data, and visualize the results to gain insights into avocado sales patterns.
What kind of data did you work with?	The task involved analyzing the avocado dataset which contains historical data on avocado prices and sales volume in multiple US markets. It contains many columns which include, date of the avocado sale, regions, total volume, total bags, small bags, average price, large bags etc.
Briefly describe the data science task you worked on.	The data was cleaned, imported, the consistency was assessed, the data was altered as directed and also visualized.

3. TECHNICAL SKILLS

ITEM	RESPONSE
What technical skills did you use during the task?	We used several technical skills during the task, including data cleaning, data filtering , using mathematical concepts like finding mean and median , analyzing consistency and using visualization.
list any challenges or obstacles you faced while working on the task and how you overcame them.	One challenge we faced was dealing with the extra and irrelevant information provided in the dataset which needed to be cleaned out from the dataset.

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

ITEM	RESPONSE
What steps did you take to clean and prepare the data?	We dropped any rows with unnecessary or say irrelevant information.
Did you encounter any issues with the data during this process? How did you address these issues with the data?	We encountered some extra values in the dataset which were unnamed and contained sequential numbers that are irrelevant to analysing the given data. There were some other columns which contained sales for price look up codes which were not supposed to be used in the task.

5. DATA ANALYSIS (ENTER NA WHEN NOT APPLICABLE)

ITEM	RESPONSE
How did you analyze the data?	We analyzed the data by reading the data from a csv file to a dataframe, filtered data as directed, used visualization like creating a bar plot and did statistical analysis like analysing the avocado data from 2016 to 2018.
Did you use any visualization techniques to better understand the data?	Yes, we used a bar plot to determine total number of small, large and extra large bags by avocado type.
What insights did you gain from this analysis?	In the given avocado dataset, by examining factors such as sales volume, type of avocados sold, regional, regional variations, and bag sizes, insights can be gained into consumer behavior and market dynamics. Some other key insights may include identifying trends in sales over time, understanding regional preferences, determining popular avocado types, and recognizing patterns in bag size preferences.

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: JASVEENA