QKN1 — QKN1 TASK 3: PRESENTATION

ANALYTICS PROGRAMMING — D598
PRFA — QKN1

Task Overview   Submissions   Evaluation Report

COMPETENCIES

4158.1.2 : **Integrates Syntax, Control Elements, and Modular Components**
The learner integrates programming language syntax, control elements, and modular components from common data analytics programming languages to create simple programs.

4158.1.3 : **Performs Data Acquisition and Organization Tasks**
The learner performs data acquisition and organization tasks using a data analytics programming language.

INTRODUCTION

In your professional career, the ability to create data visualizations can be an effective tool for conveying important information to stakeholders.

In this task you will write a report for the stakeholders from the Task 1 scenario that explains how your code works and incorporates data visualizations.

SCENARIO

You have been hired by a small investment company that manages an equity fund comprised of 150 U.S. companies across multiple industries. The fund managers are looking to rebalance the fund's holdings and would like you to provide an analysis of the companies' performance based on data from the most recent quarter. The data can be found in the supporting documents section as "D598 Data Set".

To aid in your analysis you must write programs in Python or R to perform the following tasks:
- Import the data file into a data frame.
- Identify any duplicate rows in the data set.
- Group all IDs by state, then run descriptive statistics (mean, median, min, & max) for all numeric variables by state and store this result as a new data frame. (Code should be modified from "D598 Task 2 Original Code" in the supporting documents section)
- Filter the data frame to identify all businesses with debt-to-equity ratios that are negative.
- Create a new data frame that provides the debt-to-income ratio for every business in the data set. Debt-to-income ratio is defined as long-term debt divided by revenue.
- Concatenate the debt-to-income ratio data frame you created with the original data frame.

⑦ Help

REQUIREMENTS

Your submission must be your original work. No more than a combined total of 30% of the submission and no more than a 10% match to any one individual source can be directly quoted or closely paraphrased from sources, even if cited correctly. The similarity report that is provided when you submit your task can be used as a guide.

You must use the rubric to direct the creation of your submission because it provides detailed criteria that will be used to evaluate your work. Each requirement below may be evaluated by more than one rubric aspect. The rubric aspect titles may contain hyperlinks to relevant portions of the course.

*Tasks may **not** be submitted as cloud links, such as links to Google Docs, Google Slides, OneDrive, etc., unless specified in the task requirements. All other submissions must be file types that are uploaded and submitted as attachments (e.g., .docx, .pdf, .ppt).*

In this task you will create a report for your stakeholders by doing the following:

A. Explain how the code works for the program you submitted in Task 2.

B. Provide **4** customized data visualizations.

C. Explain how customized visualizations in part B were created.

D. Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.

E. Demonstrate professional communication in the content and presentation of your submission.

File Restrictions

File name may contain only letters, numbers, spaces, and these symbols: ! - _ . * ' ( )
File size limit: 200 MB
File types allowed: doc, docx, rtf, xls, xlsx, ppt, pptx, odt, pdf, csv, txt, qt, mov, mpg, avi, mp3, wav, mp4, wma, flv, asf, mpeg, wmv, m4v, svg, tif, tiff, jpeg, jpg, gif, png, zip, rar, tar, 7z

RUBRIC

A:CODE

NOT EVIDENT	APPROACHING COMPETENCE	COMPETENT
An explanation of how the code works for the Task 2 program is not provided.	An explanation of how the code works for the Task 2 program is provided but is incomplete or contains errors.	An explanation of how the code works for the Task 2 program is provided that is both complete and free of errors.

B:VISUALIZATIONS

NOT EVIDENT

Customized data visualizations are not provided.

APPROACHING COMPETENCE

Fewer than 4 customized data visualizations are provided, or data visualizations are not customized.

COMPETENT

4 customized data visualizations are provided.

C:CUSTOMIZATIONS

NOT EVIDENT

An explanation of how the customized data visualizations were created is not provided.

APPROACHING COMPETENCE

An explanation of how the customized data visualizations were created is provided but is incomplete or contains errors.

COMPETENT

An explanation of how customized data visualizations were created is provided that is both complete and free of errors.

D:APA SOURCES

NOT EVIDENT

The submission does not include in-text citations and references according to APA style for content that is quoted, paraphrased, or summarized.

APPROACHING COMPETENCE

The submission includes in-text citations and references for content that is quoted, paraphrased, or summarized but does not demonstrate a consistent application of APA style.

COMPETENT

The submission includes in-text citations and references for content that is quoted, paraphrased, or summarized and demonstrates a consistent application of APA style.

E:PROFESSIONAL COMMUNICATION

NOT EVIDENT

Content is unstructured, is disjointed, or contains pervasive errors in mechanics, usage, or grammar. Vocabulary or tone is unprofessional or distracts from the topic.

APPROACHING COMPETENCE

Content is poorly organized, is difficult to follow, or contains errors in mechanics, usage, or grammar that cause confusion. Terminology is misused or ineffective.

COMPETENT

Content reflects attention to detail, is organized, and focuses on the main ideas as prescribed in the task or chosen by the candidate. Terminology is pertinent, is used correctly, and effectively conveys the intended meaning. Mechanics, usage, and grammar promote accurate interpretation and understanding.

SUPPORTING DOCUMENTS

D598 Data Set.xlsx