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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instructions:**  Evaluate the homework against the outlined criteria in the below rubric, assigning a rating to each criterion. Add points earned across all criteria and convert the total points to a letter grade, assigning a “+” or “-” letter grade designation at your discretion. | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | A (+/-) | 90+ | C (+/-) | 40-64 | F (+/-) | <15 | | B (+/-) | 65-89 | D (+/-) | 15-39 |  |  | |
| **Notes:**  The deployed assignment utilizes the **Pandas** library to analyze 1 of 2 challenges. Only one assignment will be accepted for grading. The source code should also be deployed to **Github** or **Gitlab**. |  |

**Rubric for Heroes Of PyMoli:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Mastery**  **20 points** | **Approaching Mastery**  **15 points** | **Progressing**  **10 points** | **Emerging**  **5-0 points** | **Incomplete** |
| **Expected output displayed** | Output for Pymoli contains all:  ✓ Total Players  ✓ Purchase Analysis (Total)  ✓ Gender Demographics  ✓ Purchase Analysis (Gender)  ✓ Age Demographics ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items  ✓ Most profitable Items | Output for Pymoli contains at least 7:  ✓ Total Players  ✓ Purchase Analysis (Total)  ✓ Gender Demographics  ✓ Purchase Analysis (Gender)  ✓ Age Demographics ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items  ✓ Most profitable Items | Output for Pymoli contains at least 5:  ✓ Total Players  ✓ Purchase Analysis (Total)  ✓ Gender Demographics  ✓ Purchase Analysis (Gender)  ✓ Age Demographics ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items  ✓ Most profitable Items | Output for Pymoli contains 2 or fewer:  ✓ Total Players  ✓ Purchase Analysis (Total)  ✓ Gender Demographics  ✓ Purchase Analysis (Gender)  ✓ Age Demographics ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items  ✓ Most profitable Items | No submission was received  -OR-  Submission was empty or blank  -OR-  Submission contains evidence of academic dishonesty |
| **Functions used on DataFrames** | The following functions are used on DataFrames and produce correct results:  ✓ Mean  ✓ Sum  ✓ Count | The following functions are used on DataFrames and produce varying results:  ✓ Mean  ✓ Sum  ✓ Count | Two of the following functions are used on DataFrames to produce varying results:  ✓ Mean  ✓ Sum  ✓ Count | One or fewer of the following functions are used on DataFrames to produce varying results:  ✓ Mean  ✓ Sum  ✓ Count |
| **GroupBy used** | GroupBy is used in Pymoli in determining the following:  ✓ Purchase Analysis (Gender)  ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items | GroupBy is used for Pymoli in determining at least 3 of the following:  ✓ Purchase Analysis (Gender)  ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items | GroupBy is used for Pymoli in determining at least 2 of the following:  ✓ Purchase Analysis (Gender)  ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items | GroupBy is used for Pymoli in determining 1 or fewer of the following:  ✓ Purchase Analysis (Gender)  ✓ Purchasing Analysis (Age)  ✓ Top Spenders  ✓ Most Popular Items |
| **Cut method used to create new series of binned data** | Pymoli data was cut and binned for both correctly:  ✓ Age Demographics  ✓ Purchasing Analysis (Age) | Pymoli data was cut and binned for one correctly:  ✓ Age Demographics  ✓ Purchasing Analysis (Age) | Pymoli data attempted to cut and binned for one with errors:  ✓ Age Demographics  ✓ Purchasing Analysis (Age) | Pymoli data was either not attempted or was attempted to cut and bin but produces no results:  ✓ Age Demographics  ✓ Purchasing Analysis (Age) |
| **Written Report** | Presents a cohesive written analysis that:  ✓ Draws three correct conclusions from the data for Pymoli | Presents a cohesive written analysis that:  ✓ Draws at least two correct conclusions from the data for Pymoli | Presents a cohesive written analysis that:  ✓ Draws at least one correct and one incomplete conclusion from the data for Pymoli | Presents a limited written analysis or no written analysis that:  ✓ Incorrect and incomplete conclusion from the data for Pymoli |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instructions:**  Evaluate the homework against the outlined criteria in the below rubric, assigning a rating to each criterion. Add points earned across all criteria and convert the total points to a letter grade, assigning a “+” or “-” letter grade designation at your discretion. | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | A (+/-) | 100-90 | C (+/-) | 79-70 | F (+/-) | < 60 | | B (+/-) | 89-80 | D (+/-) | 69-60 |  |  | |

**Rubric for PyCitySchools:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Mastery**  **20 points** | **Approaching Mastery**  **15 points** | **Progressing**  **10 points** | **Emerging**  **5-0 points** | **Incomplete** |
| **Expected output displayed** | ✓ Output for PyCitySchools contains all:  ✓ District Summary  ✓ School Summary  ✓ Top Performing Schools (By % Overall Passing)  ✓ Bottom Performing Schools (By % Overall Passing)  ✓ Math Score by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending  ✓ Scores by School Size  ✓ Scores by School Type | ✓ Output for PyCitySchools contains at least 7:  ✓ District Summary  ✓ School Summary  ✓ Top Performing Schools (By % Overall Passing)  ✓ Bottom Performing Schools (By % Overall Passing  ✓ Math Score by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending  ✓ Scores by School Size  ✓ Scores by School Type | ✓ Output for PyCitySchools contains at least 5:  ✓ District Summary  ✓ School Summary  ✓ Top Performing Schools (By % Overall Passing)  ✓ Bottom Performing Schools ((By % Overall Passing)  ✓ Math Score by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending | ✓ Output for PyCitySchools contains 2 or fewer:  ✓ District Summary  ✓ School Summary  ✓ Top Performing Schools (By % Overall Passing)  ✓ Bottom Performing Schools ((By % Overall Passing)  ✓ Math Score by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending | No submission was received  -OR-  Submission was empty or blank  -OR-  Submission contains evidence of academic dishonesty |
| **Functions used on DataFrames** | The following functions are used on DataFrames and produce correct results:  ✓ Mean  ✓ Sum  ✓ Count | The following functions are used on DataFrames and produce varying results:  ✓ Mean  ✓ Sum  ✓ Count | Two of the following functions are used on DataFrames to produce varying results:  ✓ Mean  ✓ Sum  ✓ Count | One or fewer of the following functions are used on DataFrames to produce varying results:  ✓ Mean  ✓ Sum  ✓ Count |
| **GroupBy used** | GroupBy is used in PyCitySchools in determining the following:  ✓ School Summary  ✓ Math Scores by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending  ✓ Scores by School Size  ✓ Scores by School Type | GroupBy is used for PyCitySchools in determining at least 4 of the following:  ✓ School Summary  ✓ Math Scores by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending  ✓ Scores by School Size  ✓ Scores by School Type | GroupBy is used for PyCitySchools in determining at least 3 of the following:  ✓ School Summary  ✓ Math Scores by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending  ✓ Scores by School Size  ✓ Scores by School Type | GroupBy is used for PyCitySchools in determining 1 or fewer of the following:  ✓ School Summary  ✓ Math Scores by Grade  ✓ Reading Score by Grade  ✓ Scores by School Spending  ✓ Scores by School Size  ✓ Scores by School Type |
| **Cut method used to create new series of binned data** | PyCitySchools data was cut and binned for both correctly:  ✓ Scores by School Spending  ✓ Scores by School Size | PyCitySchools data was cut and binned for one correctly:  ✓ Scores by School Spending  ✓ Scores by School Size | PyCitySchools data was cut and binned for one with errors:  ✓ Scores by School Spending  ✓ Scores by School Size | PPyCitySchool data was either not attempted or was attempted to cut and bin but produces no results:  ✓ Scores by School Spending  ✓ Scores by School Size |
| **Written Report** | Presents a cohesive written analysis that:  ✓ Draws two correct conclusions from the data for Pyschools | Presents a cohesive written analysis that:  ✓ Draws at least one correct conclusion from the data for Pyschools | Presents a cohesive written analysis that:  ✓ Draws at least one complete but incorrect conclusion from the data for Pyschools | Presents a limited written analysis or no written analysis that:  ✓ Incorrect and incomplete conclusion form the data for Pyschools |