



## Data Boot Camp Grading Rubric

# Module 4 - Pandas Homework - Pandas, Pandas, Pandas

### 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 (+/-)	70-79	F (+/-)	<60
B (+/-)	80-89	D (+/-)	60-69		

### 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:

	Proficiency 100 to > 90 points	Approaching Proficiency 89 to > 80 points	Developing Proficiency 79 to > 60 points	Emerging 59 to > 0 points	Incomplete
<b>Expected output displayed</b>	Output for Pymoli contains all: <ul style="list-style-type: none"><li>✓ Total Players</li><li>✓ Purchase Analysis (Total)</li><li>✓ Gender Demographics</li><li>✓ Purchase Analysis (Gender)</li><li>✓ Age Demographics</li><li>✓ Purchasing Analysis (Age)</li><li>✓ Top Spenders</li><li>✓ Most Popular Items</li><li>✓ Most profitable Items</li></ul>	Output for Pymoli contains at least 7: <ul style="list-style-type: none"><li>✓ Total Players</li><li>✓ Purchase Analysis (Total)</li><li>✓ Gender Demographics</li><li>✓ Purchase Analysis (Gender)</li><li>✓ Age Demographics</li><li>✓ Purchasing Analysis (Age)</li><li>✓ Top Spenders</li><li>✓ Most Popular Items</li><li>✓ Most profitable Items</li></ul>	Output for Pymoli contains at least 5: <ul style="list-style-type: none"><li>✓ Total Players</li><li>✓ Purchase Analysis (Total)</li><li>✓ Gender Demographics</li><li>✓ Purchase Analysis (Gender)</li><li>✓ Age Demographics</li><li>✓ Purchasing Analysis (Age)</li><li>✓ Top Spenders</li><li>✓ Most Popular Items</li><li>✓ Most profitable Items</li></ul>	Output for Pymoli contains 2 or fewer: <ul style="list-style-type: none"><li>✓ Total Players</li><li>✓ Purchase Analysis (Total)</li><li>✓ Gender Demographics</li><li>✓ Purchase Analysis (Gender)</li><li>✓ Age Demographics</li><li>✓ Purchasing Analysis (Age)</li><li>✓ Top Spenders</li><li>✓ Most Popular Items</li><li>✓ Most profitable Items</li></ul>	No submission was received  -OR-  Submission was empty or blank  -OR-  Submission contains evidence of academic dishonesty
<b>Functions</b>	The following functions are used on	The following functions are used on	Two of the following functions are	One or fewer of the following	



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<b>used on DataFrames</b>	DataFrames and produce correct results: ✓ Mean ✓ Sum ✓ Count	DataFrames and produce varying results: ✓ Mean ✓ Sum ✓ Count	used on DataFrames to produce varying results: ✓ Mean ✓ Sum ✓ Count	functions are used on DataFrames to produce varying results: ✓ Mean ✓ Sum ✓ Count	
<b>GroupBy used</b>	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	
<b>Cut method used to create new series of binned data</b>	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)	
<b>Written Report</b>	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 (+/-)	90+	C (+/-)	70-79	F (+/-)	<60
B (+/-)	80-89	D (+/-)	60-69		

### Rubric for PyCitySchools:

	<b>Proficiency 100 to &gt; 90 points</b>	<b>Approaching Proficiency 89 to &gt; 80 points</b>	<b>Developing Proficiency 79 to &gt; 60 points</b>	<b>Emerging 59 to &gt; 0 points</b>	<b>Incomplete</b>
<b>Expected output displayed</b>	<ul style="list-style-type: none"><li>✓ Output for PyCitySchools contains all:<ul style="list-style-type: none"><li>✓ District Summary</li><li>✓ School Summary</li><li>✓ Top Performing Schools (By % Overall Passing)</li><li>✓ Bottom Performing Schools (By % Overall Passing)</li><li>✓ Math Score by Grade</li><li>✓ Reading Score by Grade</li></ul></li></ul>	<ul style="list-style-type: none"><li>✓ Output for PyCitySchools contains at least 7:<ul style="list-style-type: none"><li>✓ District Summary</li><li>✓ School Summary</li><li>✓ Top Performing Schools (By % Overall Passing)</li><li>✓ Bottom Performing Schools (By % Overall Passing)</li><li>✓ Math Score by Grade</li><li>✓ Reading Score by Grade</li></ul></li></ul>	<ul style="list-style-type: none"><li>✓ Output for PyCitySchools contains at least 5:<ul style="list-style-type: none"><li>✓ District Summary</li><li>✓ School Summary</li><li>✓ Top Performing Schools (By % Overall Passing)</li><li>✓ Bottom Performing Schools ((By % Overall Passing)</li><li>✓ Math Score by Grade</li><li>✓ Reading Score by Grade</li></ul></li></ul>	<ul style="list-style-type: none"><li>✓ Output for PyCitySchools contains 2 or fewer:<ul style="list-style-type: none"><li>✓ District Summary</li><li>✓ School Summary</li><li>✓ Top Performing Schools (By % Overall Passing)</li><li>✓ Bottom Performing Schools ((By % Overall Passing)</li><li>✓ Math Score by Grade</li><li>✓ Reading Score by Grade</li><li>✓ Scores by School Spending</li></ul></li></ul>	<p>No submission was received</p> <p>-OR-</p> <p>Submission was empty or blank</p>



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	<ul style="list-style-type: none"> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> <li>✓ Scores by School Type</li> </ul>	<ul style="list-style-type: none"> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> <li>✓ Scores by School Type</li> </ul>	<ul style="list-style-type: none"> <li>✓ Scores by School Spending</li> </ul>		<p>-OR-</p> <p>Submission contains evidence of academic dishonesty</p>
<b>Functions used on DataFrames</b>	<p>The following functions are used on DataFrames and produce correct results:</p> <ul style="list-style-type: none"> <li>✓ Mean</li> <li>✓ Sum</li> <li>✓ Count</li> </ul>	<p>The following functions are used on DataFrames and produce varying results:</p> <ul style="list-style-type: none"> <li>✓ Mean</li> <li>✓ Sum</li> <li>✓ Count</li> </ul>	<p>Two of the following functions are used on DataFrames to produce varying results:</p> <ul style="list-style-type: none"> <li>✓ Mean</li> <li>✓ Sum</li> <li>✓ Count</li> </ul>	<p>One or fewer of the following functions are used on DataFrames to produce varying results:</p> <ul style="list-style-type: none"> <li>✓ Mean</li> <li>✓ Sum</li> <li>✓ Count</li> </ul>	
<b>GroupBy used</b>	<p>GroupBy is used in PyCitySchools in determining the following:</p> <ul style="list-style-type: none"> <li>✓ School Summary</li> <li>✓ Math Scores by Grade</li> <li>✓ Reading Score by Grade</li> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> <li>✓ Scores by School Type</li> </ul>	<p>GroupBy is used for PyCitySchools in determining at least 4 of the following:</p> <ul style="list-style-type: none"> <li>✓ School Summary</li> <li>✓ Math Scores by Grade</li> <li>✓ Reading Score by Grade</li> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> <li>✓ Scores by School Type</li> </ul>	<p>GroupBy is used for PyCitySchools in determining at least 3 of the following:</p> <ul style="list-style-type: none"> <li>✓ School Summary</li> <li>✓ Math Scores by Grade</li> <li>✓ Reading Score by Grade</li> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> <li>✓ Scores by School Type</li> </ul>	<p>GroupBy is used for PyCitySchools in determining 1 or fewer of the following:</p> <ul style="list-style-type: none"> <li>✓ School Summary</li> <li>✓ Math Scores by Grade</li> <li>✓ Reading Score by Grade</li> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> <li>✓ Scores by School Type</li> </ul>	
<b>Cut method used to create new series of binned data</b>	<p>PyCitySchools data was cut and binned for both correctly:</p> <ul style="list-style-type: none"> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> </ul>	<p>PyCitySchools data was cut and binned for one correctly:</p> <ul style="list-style-type: none"> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> </ul>	<p>PyCitySchools data was cut and binned for one with errors:</p> <ul style="list-style-type: none"> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> </ul>	<p>PPyCitySchool data was either not attempted or was attempted to cut and bin but produces no results:</p> <ul style="list-style-type: none"> <li>✓ Scores by School Spending</li> <li>✓ Scores by School Size</li> </ul>	
<b>Written Report</b>	<p>Presents a cohesive written analysis that:</p> <ul style="list-style-type: none"> <li>✓ Draws two correct conclusions from the data for Pyschools</li> </ul>	<p>Presents a cohesive written analysis that:</p> <ul style="list-style-type: none"> <li>✓ Draws at least one correct conclusion from the data for Pyschools</li> </ul>	<p>Presents a cohesive written analysis that:</p> <ul style="list-style-type: none"> <li>✓ Draws at least one complete but incorrect conclusion from the data for Pyschools</li> </ul>	<p>Presents a limited written analysis or no written analysis that:</p> <ul style="list-style-type: none"> <li>✓ Incorrect and incomplete conclusion form the data for Pyschools</li> </ul>	



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