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Part 1

	Available	Marks
Q1 The file <i>roller_coasters.csv</i> contains data on a number of roller coasters from all around the world. This shows the name, type, material, manufacturer, location and current status for each roller coaster and may also show data on the height, length, speed, and number of inversions achieved by each roller coaster. Load this data into a data frame <i>coasterData</i> , ensuring that the headers are imported and that the type, material, manufacturer, and current status are imported as factors. Your script should assume that the data file is stored in the same folder as the script file. Display the resulting data frame.	5	5
Q2: Create a new data frame <i>highestData</i> that shows the name, height, park and status of the highest operating roller coaster of each type of roller coaster. Display this data frame.	10	7
Q3: Include a function <i>displayComparison()</i> that will take the <i>seating_type</i> as a parameter and will produce a bar chart showing the speed of the top ten fastest operating rollercoasters of that seating type. Display this using inverted roller coasters.	15	11
Q4: Include a function <i>correlateLengthSpeed()</i> that generates a data frame <i>lengthSpeed</i> that shows the mean height, length, and coefficient of correlation of length and speed for Sit Down roller coasters. These calculations should be based on records in <i>coasterData</i> that contain no NA fields.	15	11
Q5: Include a function <i>compareWoodenSteel()</i> that performs a t-test to see if there is a significant difference at the $p=0.05$ level between the speeds of wooden rollercoasters and steel rollercoasters. Include your hypotheses and your conclusions in your comments. These calculations should be based on records in <i>coasterData</i> that contain no NA fields.	10	8
Commenting, white space and code presentation	5	5
TOTAL		47
Comment Q1: Good. Q2: Good solution. You could also have written a function and sent the type to the function. Q3: Good solution. The bar chart would be better with the x and y axes swapped as then you'd always see all of the coaster names. Q4: Good. Q5: Excellent handling of presenting the results to the user. Clear well-spaced code with good comments.		

Part 2

	Available	Marks
Explain how your code works for each section (including flow charts) and how you have extracted the required data from the data frame where you have stored the imported data. TASK 1	30	20
A reflection on what you found challenging, what you learned, and what you would do differently next time.	10	6
<i>TOTAL</i>		26
Comments All of your flow charts are linear, even when you have if statements in the code. You need to document at a more detailed level. The code descriptions are good. Reflection is good, although the conclusion does stray away from the assignment a little.		