

Student	Han Xiyu	71
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Part 1

	Available	Marks
Produce an appropriate graphic to show how the average seasonal maximum temperatures have changed from 1892 to 2022. You should plot the values for every tenth year rather than for every year.	10	6
Calculate the correlation between the total annual rainfall and the annual maximum temperature.	10	6
Perform a t-test to identify whether there is a significant difference in minimum temperatures between August 1890-1910 and August 2000-2020.	10	5
Perform an ANOVA test to identify if there are statistically significant differences in the annual numbers of wet days in each complete decade starting in 1891 and finishing in 2020. If such a difference is found, perform the appropriate ad-hoc tests to identify where the differences lie.	15	9
Commenting, white space and code presentation	5	5
TOTAL		31
Comment Q1: Data file name incorrect – always assume that the file is in the same directory. Also, don't change the name of the data file. Xlsx library did not work. Good graphic with very good labelling. Q2: Data file name incorrect – always assume that the file is in the same directory. Also, don't change the name of the data file. Good graphics to show the correlations , but you also need to give the value of the correlation parameter. Q3: Data file name incorrect – always assume that the file is in the same directory. Also, don't change the name of the data file. What are your hypotheses? Which one is accepted and which rejected? Coding for the calculation is fine. Q4: Data file name incorrect – always assume that the file is in the same directory. Also, don't change the name of the data file. What are your hypotheses? Which one is accepted and which rejected? You would have been better using aov_summary as in the class rather than the hoc_result you've used. Correct file name, includes name and student number, good commenting and use of white space. You could have gained more marks by writing your own functions for these tasks.		

Part 2

	Available	Marks
Explain how your code works (including a flow chart) and how you have extracted the required data from the data frame where you have stored the imported data. TASK 1	10	8
Explain how your code works (including a flow chart) and how you have extracted the required data from the data frame where you have stored the imported data. TASK 2	10	8
Explain how your code works (including a flow chart) and how you have extracted the required data from the data frame where you have stored the imported data. If you are performing tests that examine statistical significance then you should also clearly state your hypotheses and the meaning of any results. TASK 3	10	8
Explain how your code works (including a flow chart) and how you have extracted the required data from the data frame where you have stored the imported data. If you are performing tests that examine statistical significance then you should also clearly state your hypotheses and the meaning of any results. TASK 4	10	8
A reflection on what you found challenging, what you learned, and what you would do differently next time.	10	8
TOTAL		40
Comments Q1: Good. Q2: Good. Q3: Good. Q4: Good. Q5: Some excellent points raised. Good solution of the dense y-axis. Very good write-up.		