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| Student | Su Bingyu | 62 |
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## Part 1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Available | Marks |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| Generate WineSamples dataframe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5         | 3     |
| Add proline categories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10        | 7     |
| Add ratio of hue to colour intensity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5         | 3     |
| Generate WineSummary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5         | 3     |
| Add descriptive data for alcohol and phenols                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10        | 8     |
| Identify high/v. high proline levels                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 10        | 7     |
| Commenting and use of white space                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5         | 3     |
| Comments<br>You were not asked to remove any records with NA in them, but should have dealt with any NA data as you went along. If you had another good reason to remove the records you should say so in the comments.<br>Using the percentiles is a good way of generating the categories.<br>Good use of the aggregate function.<br>Calculation of high/v.high is good, but it would be better to format the result as 46.2% as opposed to 0.462.<br>This all works, but it would have been good to see more of it implemented using functions.<br>The use of white space is good, but more comments are needed. |           |       |

## Part 2

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Available | Marks |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| Create the countryData dataframe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5         | 3     |
| Create the CovidSymmary dataframe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 15        | 12    |
| Check the data for normality and process accordingly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10        | 5     |
| Perform the appropriate t-tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5         | 4     |
| Perform the appropriate ANOVA tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 10        | 8     |
| Commenting and use of white space                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 5         | 5     |
| <p>Comments</p> <p>Remember to always check your filepaths before sharing a script.</p> <pre>&gt; setwd("E:/statistical assignment2") Error in setwd("E:/statistical assignment2") :   cannot change working directory &gt; countryData&lt;-read.csv("./CovidData.CSV",header = TRUE,stringsAsFactors = FALSE) &gt; View(countryData)</pre> <p>Good use of a function for the descriptive statistics.</p> <p>The process of testing for normality is fine, but you should be working with new cases not with population</p> <p>The t-test is fine, but remember to state your hypotheses before doing the calculations so you can do a formal rejection or acceptance of the null hypothesis.</p> <p>Checking for all four parameters is a very good idea.</p> <p>Good comments and use of white space.</p> |           |       |