

## Problem n.1

The files `red.txt` and `white.txt` contain the percentage of alcohol, the density and the acidity of 21 bottles of red wine and 33 bottles of white wine respectively.

- a) Perform a statistical test of level 95% to verify if the mean of the three variables differ for red and white wines.
- b) Report the mathematical expression and the centre of the rejection region and value of the test statistics.
- c) Compute and report the p-value of the test at point (a).
- d) Which are the assumptions of the previous test? Are they met?
- e) Interpret the results of the test at point (a) through three Bonferroni intervals of global level 95% for appropriate differences in the mean. Comment the result.

Upload your results here:

<https://forms.office.com/Pages/ResponsePage.aspx?id=K3EXCvNtXUKAjjCd8ope6-9ASOGWf2lHjvGX24HiqFVUND1GT11IU1E4MVg1R0xCWFIwMlJMQjFBVC4u>