

Problem n.1

The Galician Food Association has launched an award for the *Best Pulpo a la Gallega* (meaning Galician-style octopus). As part of the challenge, two tasters are sent to evaluate the 30 finalist octopus dishes in A Coruña and the 30 finalist octopus dishes in Pontevedra. Files `acoruna.txt` and `pontevedra.txt` collect the evaluations on each of the finalist dishes given by the tasters in A Coruña and Pontevedra, respectively. Assume the evaluations on different dishes to be independent, and the evaluations of the two tasters on the same octopus dish to come from a bivariate Gaussian distribution.

- a) Perform a statistical test of level 99% to verify if the mean evaluations in the two cities differ. State and verify the model assumptions.
- b) Interpret the results of the test at point (a) through two Bonferroni intervals of global level 99% for appropriate differences in the mean. Comment the result.
- c) Is there statistical evidence to state that, at level 99%, the *average** evaluations of A Coruña's octopus dishes are in mean higher than those of Pontevedra's octopus dishes?

[*by *average evaluation* of a octopus dishes is meant the one obtained by averaging the evaluations of the two tasters on that dishes]

Upload your results here:

<https://forms.office.com/Pages/ResponsePage.aspx?id=K3EXCvNtXUKAjjCd8ope6-9AS0GWf2lHjvGX24HiqFVUQzU5QkcZTEJOWUhLQkpJR0UwTFVBOTRLNC4u>