Politecnico di Milano Scuola di Ingegneria Industriale e dell'Informazione

APPLIED STATISTICS June 18th, 2021

Problem n.1

The file holiday.txt contains the prices (€) of 120 accommodations for two people in Liguria for the first week of August 2021. The file contains information about the location (Rapallo/Chiavari) and the type of accommodation (hotel, bed&breakfast, apartment).

- a) Formulate a complete ANOVA model for the price of the accommodation as a function of the factors location and type. Report and verify the assumptions of the model.
- b) Through appropriate statistical tests, propose a reduced model.
- c) Report the estimates of the parameters of the model at point b)
- d) Provide Bonferroni intervals (global level 95%) for the differences between the mean value of prices belonging to the homogeneous groups identified by the model at point (b). Comment the results.

Upload your results here:

https://forms.office.com/Pages/ResponsePage.aspx?id=K3EXCvNtXUKAjjCd8ope612LHtvIHvFEsEi2L6mhPg lUMjIyUDAOTVk2RUhRQO5YV1lCNFhJMkFOUC4u