Silesian University of Technology

Applied Statistics
Laboratory 3

1) Generate randomly ten numbers between 0 and 1 and use them as a simulated dataset of p-values for your function. Write a function which calculates the Bonferroni multiple testing correction. You may use existing functions to check whether your function works correctly.
2) Load the dataset provided on the Platform. These are p-values from t-tests on differentiating levels of proteins in sick and healthy patients. How many p-values are significant at the level of 0.05? Plot a histogram of the p-values. Now use your function to perform the Bonferroni multiple testing correction. How many p-values remain significant after correcting for multiple testing?