

Assignment #3

Implement a function that computes the p-value to test the hypothesis that the mean of one dataset is equal to the mean of another dataset. The function should take as inputs the two datasets and the significance level, and outputs the p-value. The significance level is 0.05.

Deliverables:

- Your code.
- Apply the function to the two datasets “Data3-1.txt” and “Data3-2.txt”. What is the p-value in this case? Plot the histogram of both datasets.
- Apply the function to the two datasets “Data3-1.txt” and “Data3-3.txt”. What is the p-value in this case? Plot the histogram of both datasets.

Important Notes:

- Do not use Python built-in functions, you can just use functions that compute the inverse of the Gaussian cumulative distribution function.
- This is an individual assignment. It is not a team assignment.