Homework 4

Total points : 10

1. Using the technique of copula, statistically compute the following:

$$\lim_{n\to\infty} \int_0^1 \dots \int_0^1 \frac{x_1^{101} + \dots + x_n^{101}}{x_1 + \dots + x_n} dx_1 \dots dx_n.$$

Points : 5

2. Download a bivariate data and fit into a simple linear regression model. For this given data, estimate the unknwon parameters of the aforementioned model using the LSE and the LAD techniques. Compare the performance of the LSE and the LAD estimators.

Points : 5

Deadline: Deadline of submission is April 04, 2025.

Remark: You can use any package or any programming language to carry out the study.