

# Homework 1

Total points : 15

1. Download Iris data and check whether the observations associated with Iris setosa, Iris virginica and Iris versicolor obtained from the same distribution or not.

Points : 7

2. Download a multivariate (i.e, dimension is strictly greater than one) data and compute/draw multivariate quantile contours when  $\|\mathbf{u}\| = \frac{i}{10}$ , where  $i = 1, \dots, 9$ . Using those contours, describe various features of the data set.

Points : 8

**Deadline:** Deadline of submission is January 24, 2024. Regarding other issues related to submission will be informed in 2-3 days.

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