“μονάδα”

Given $X \in R^{n \times d}$ and $y \in R^n$, find $W \in R^d$ such that error $\| h - y \|_2$ is minimised where $h = XW$. However there is a constraint that W should be a **unit** vector ($\|W\|_2 = 1$).

You are given data-x, data-y containing X and y. You should submit a file named as data-w which contains the W.
Files can be loaded as `np.loadtxt("data-x")` in Python.You can use `np.savetxt("data-w", W)` to save the weights.

Evaluation

1. First, we will check that W is a unit vector, failing to which will result in a score of 0.
2. $h = X_{test}W$ is computed and error $\|h - y\|_2$ is measured. Marks are provided based on the relative error of other participants. X_{test} will not be provided to participants.