

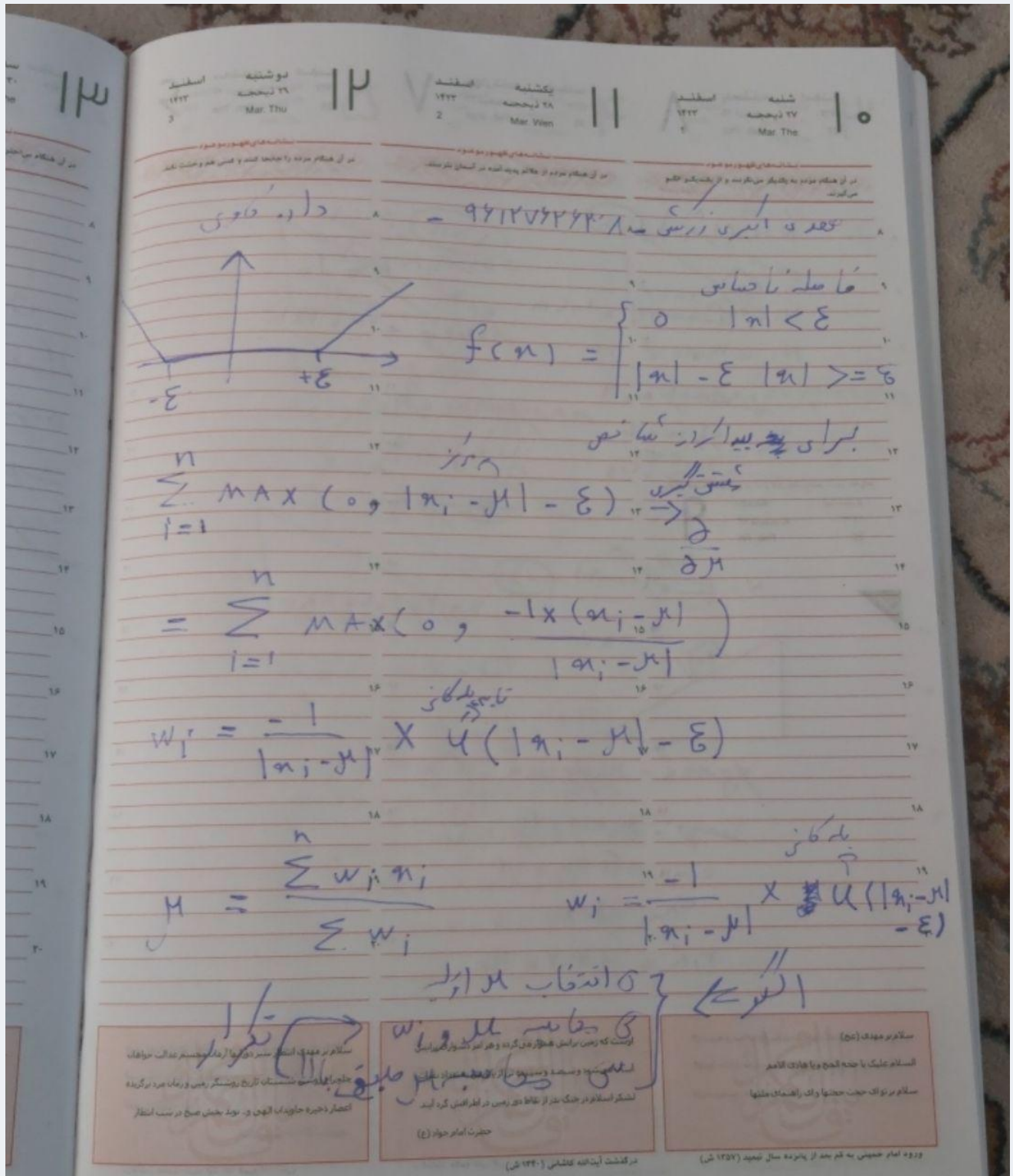
Insensitive Distance

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Insensitive Distance:

With insensitive distance we ignore little distances with the means of the clusters as much as epsilon.

Here in this paper we are going to see the definition and calculating indicator of each cluster and weights of data.



so as we can see μ is the indicator of each cluster and w_i is weight for each data.

The Dataset : wine

Classes : 3

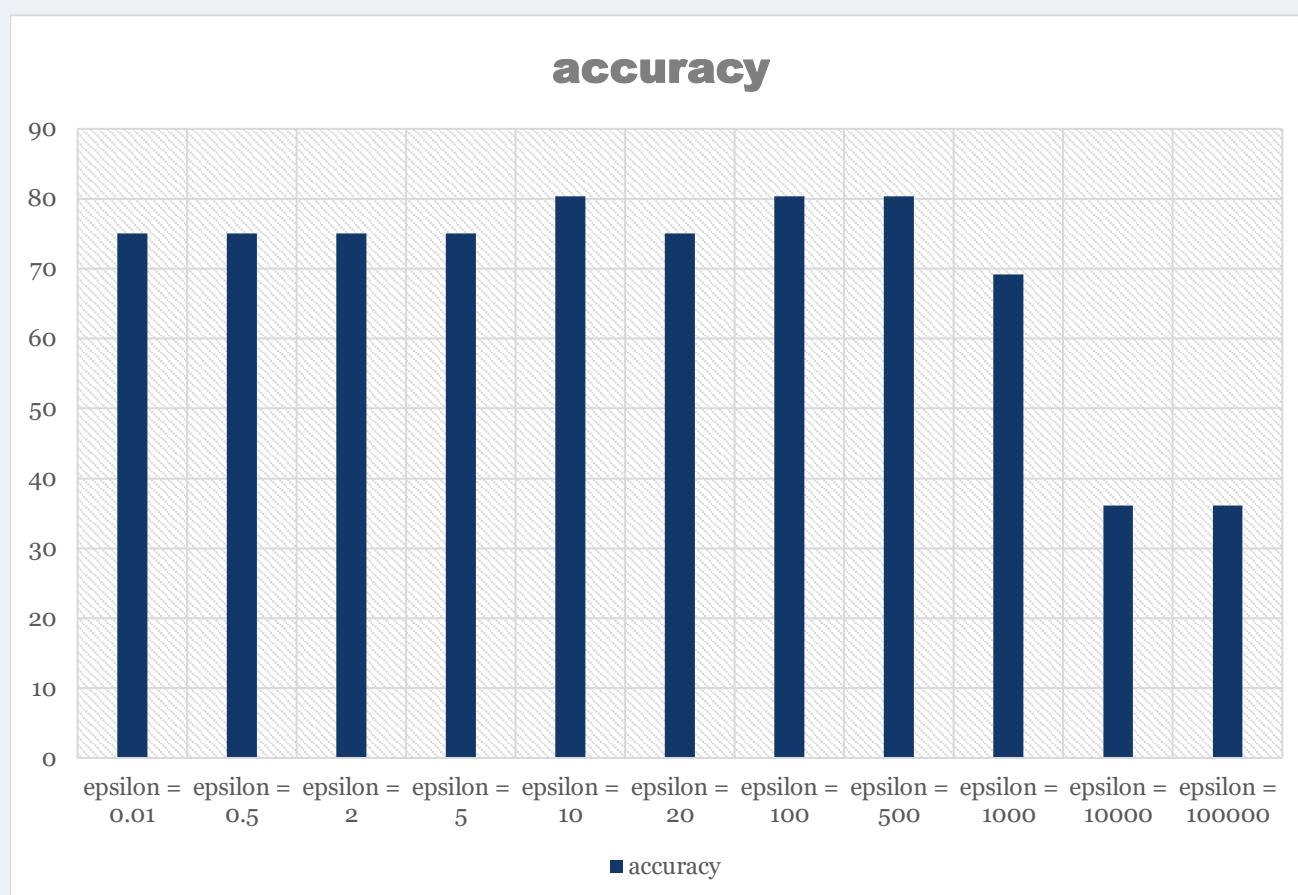
Samples per class : [59,71,48]

Samples total : 178

Dimensionality : 13

Features : real, positive

accuracies for different epsilons:



As you can see, by increasing the value of epsilon, the value of our error is sometimes low and sometimes high, and it is completely fixed somewhere.

After looking at the data and reviewing their event table, we found that epsilon 10 was more suitable for the first and 128 values for the second and third categories.

It is better to get a separate amount for each category, in which case you will reach 84%.

The amount of epsilon should be chosen according to the data and their explanation.

For our data, Manhattan's distance was better.(read distance result on

<https://github.com/maze1377/DataMining>)

Thank you :)