ITMAL

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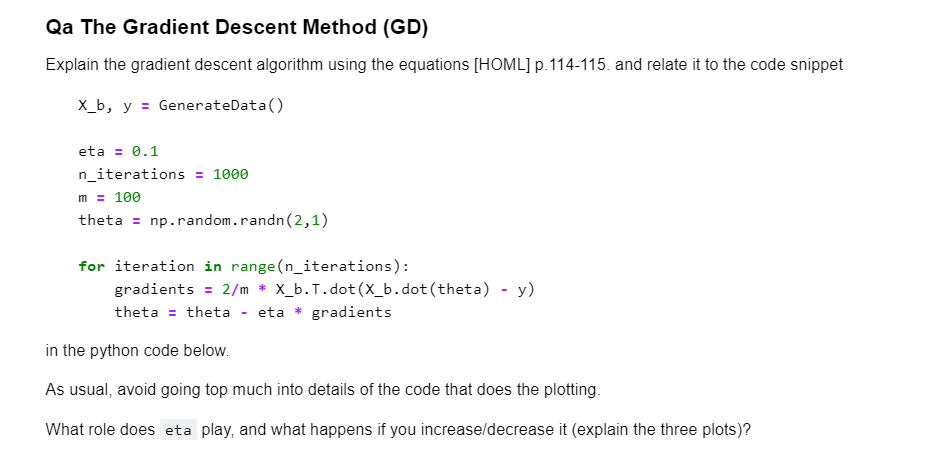
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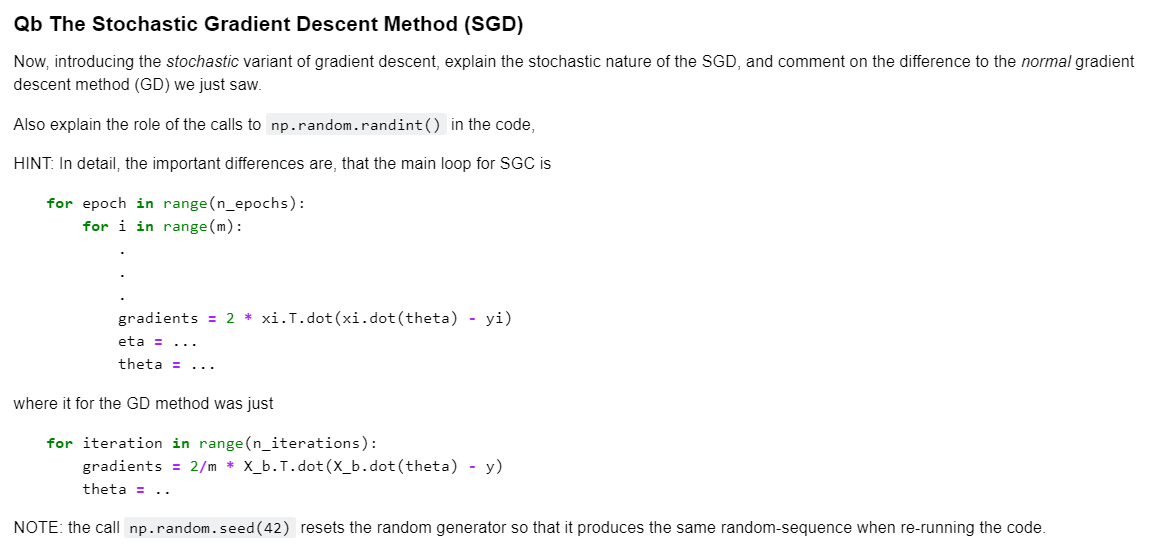
# Gradient descent

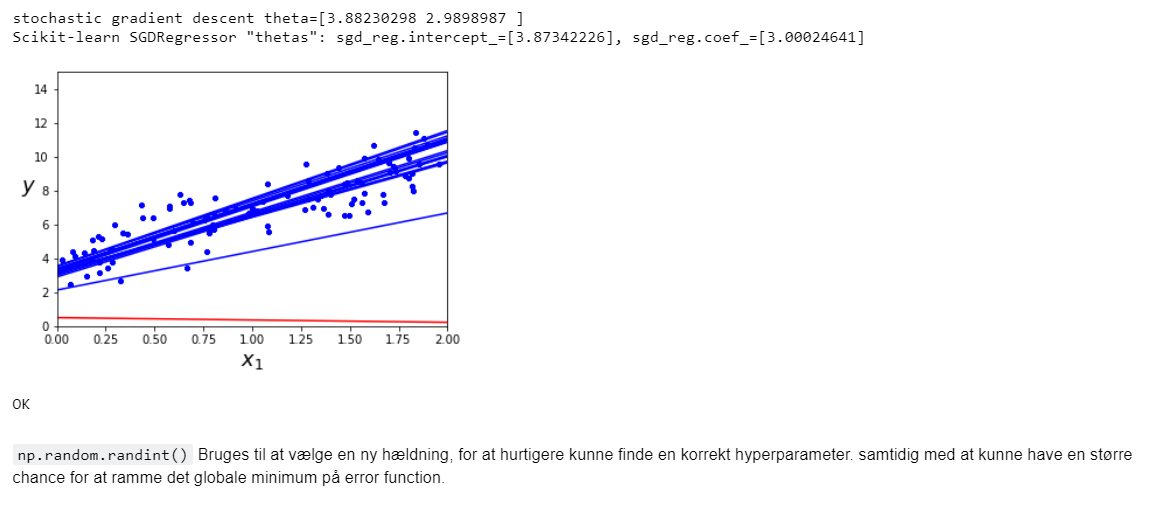
## Qa:



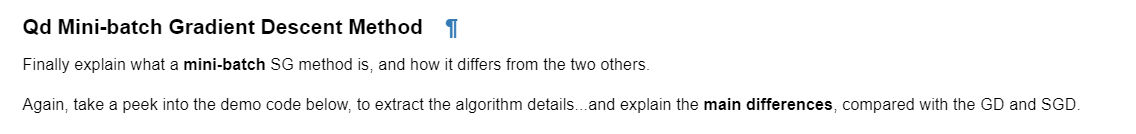


## Qb:





## Qd:

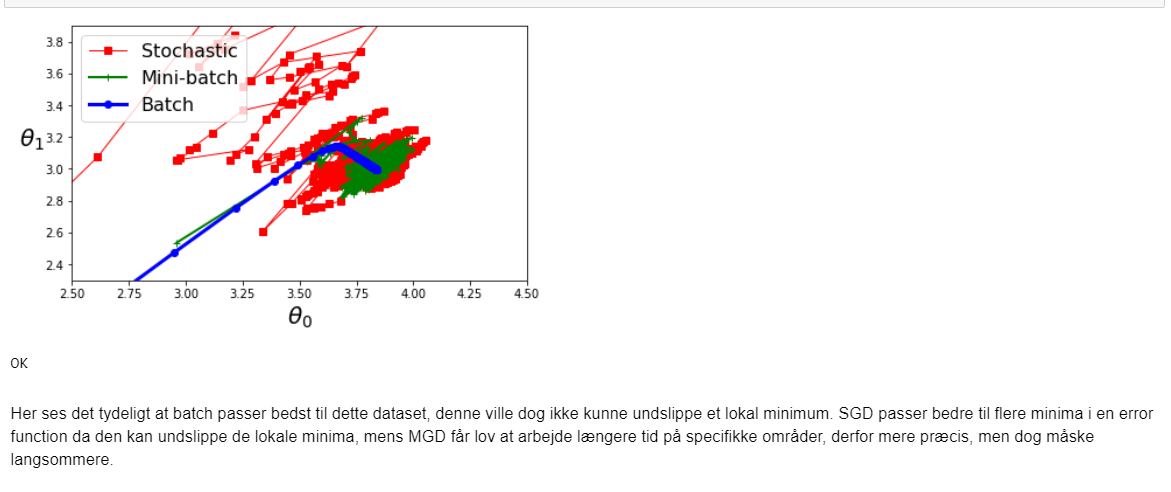


### Forklaring:



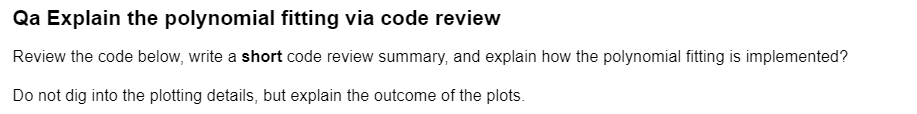
## Qe:

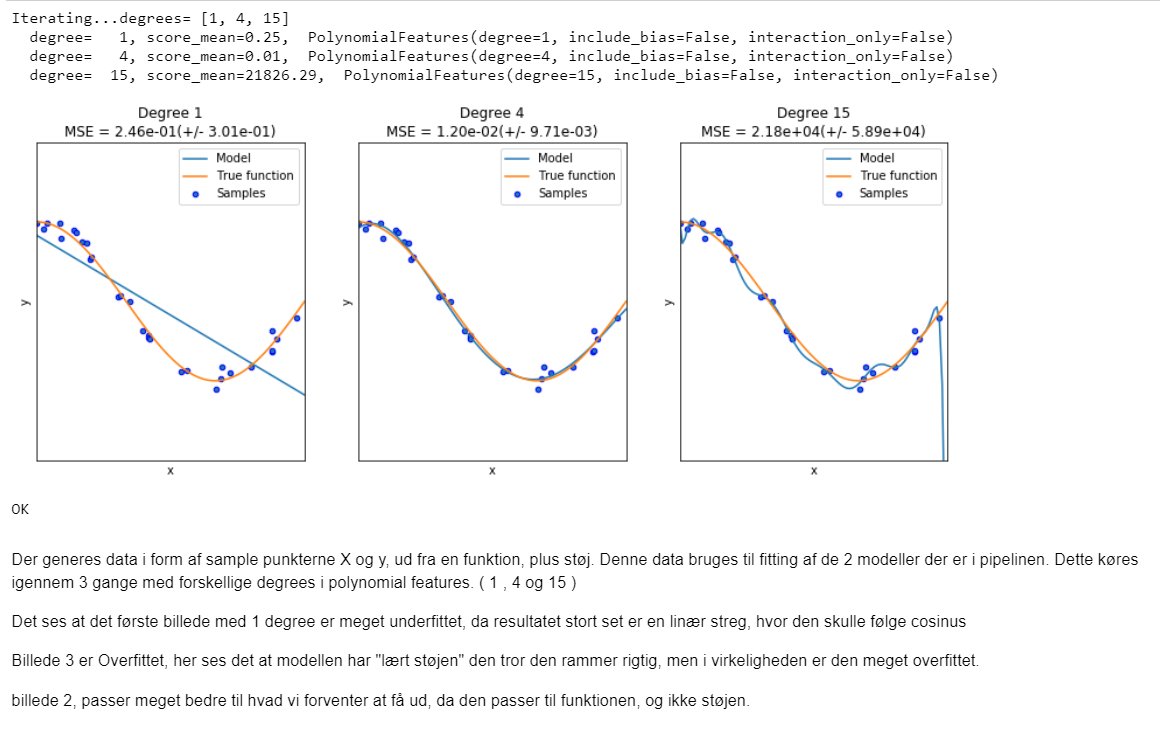




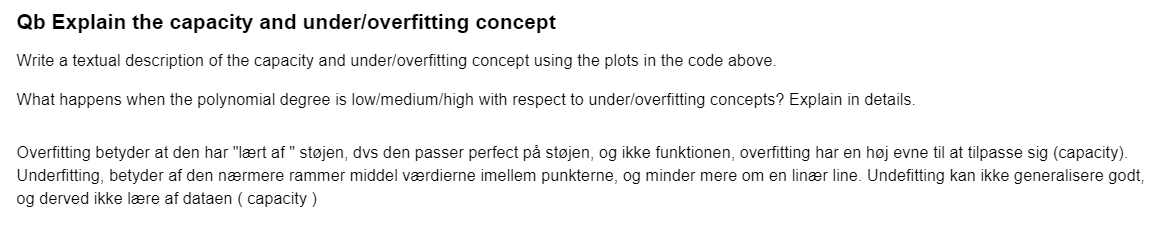
# Capacity under overfitting

## Qa:



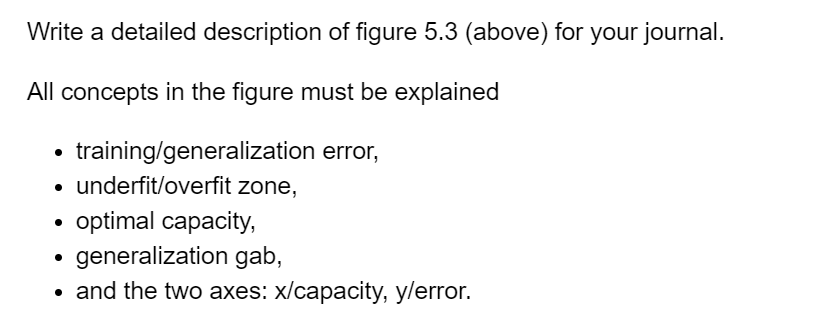


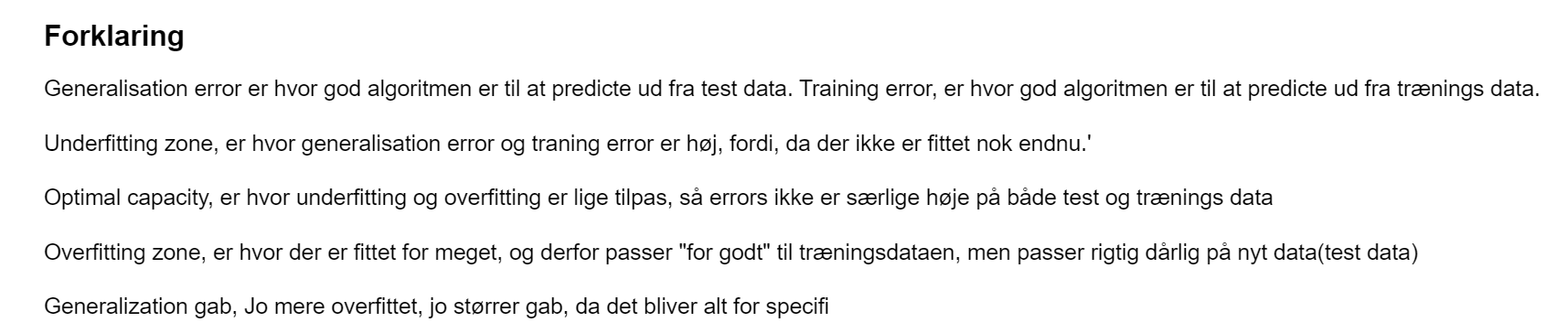
## Qb:



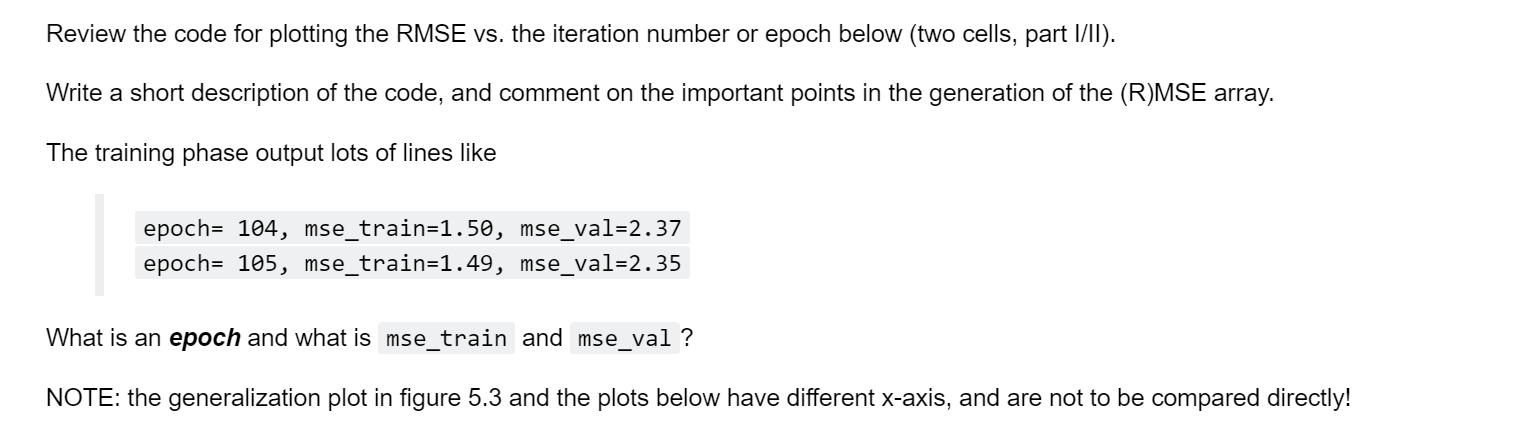
# Generalization error

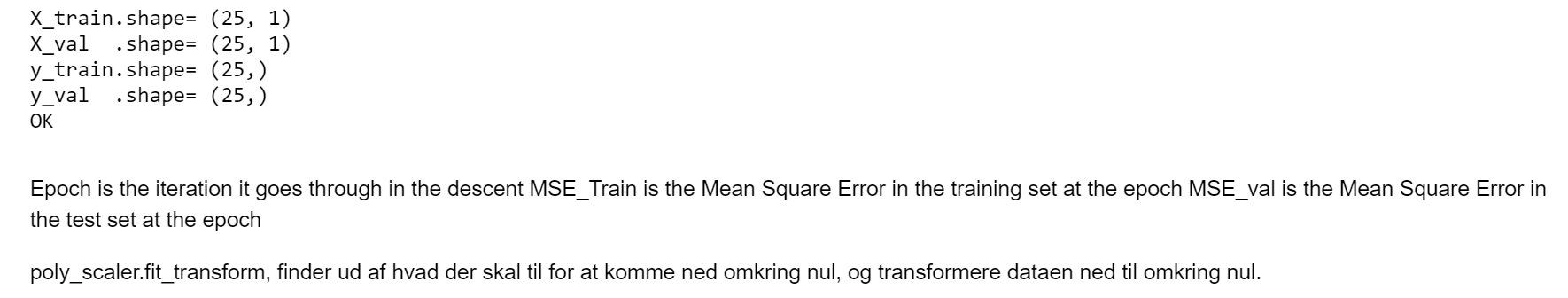
## Qa:



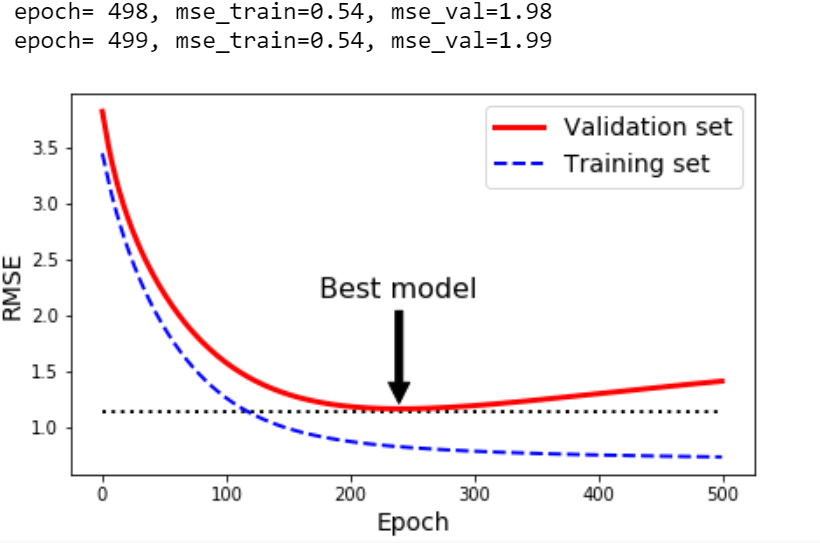


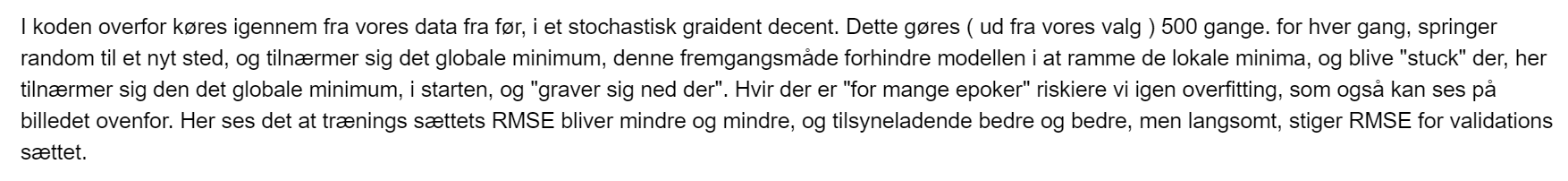
## Qb:



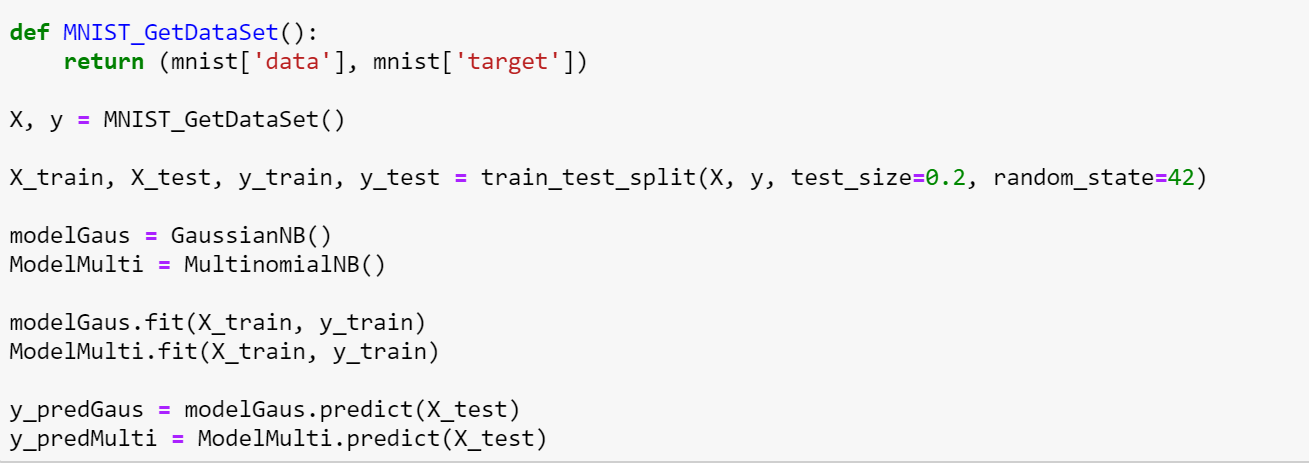


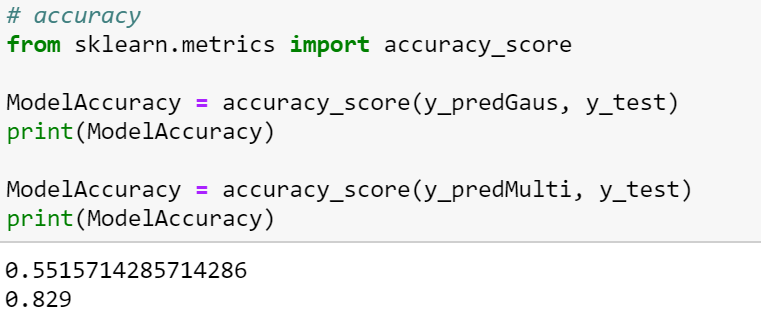
## Qb part II:

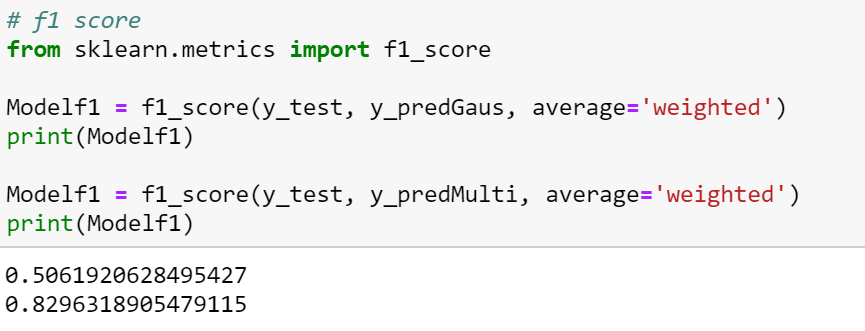


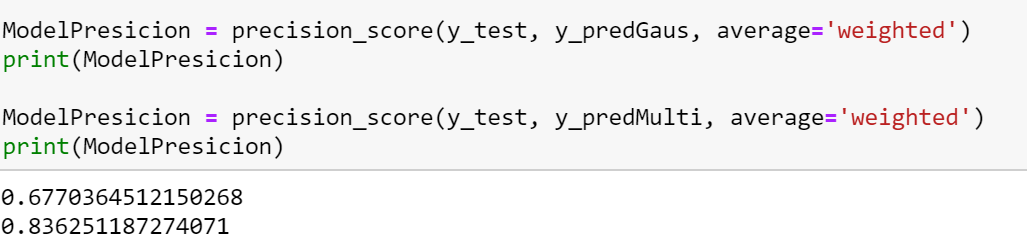


# Naïve Bayes



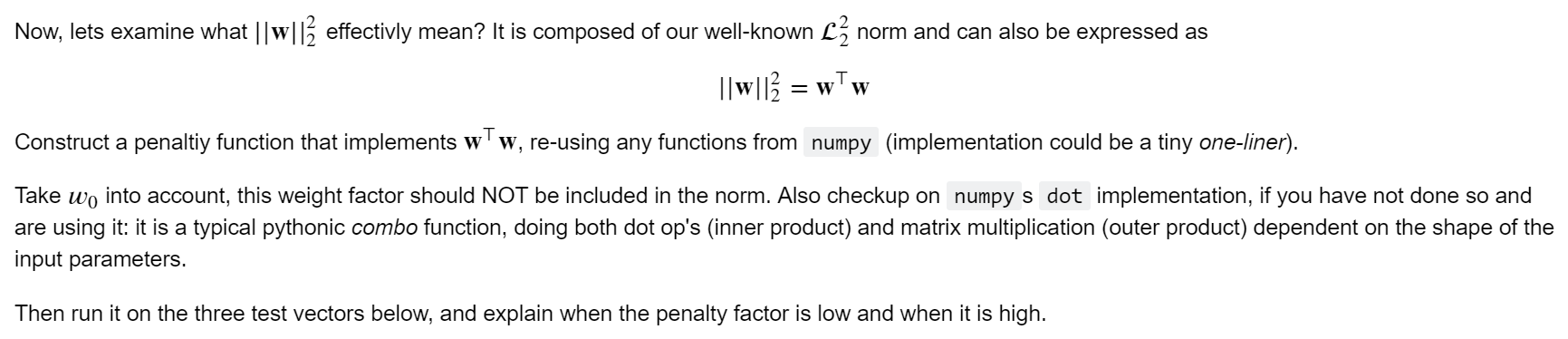


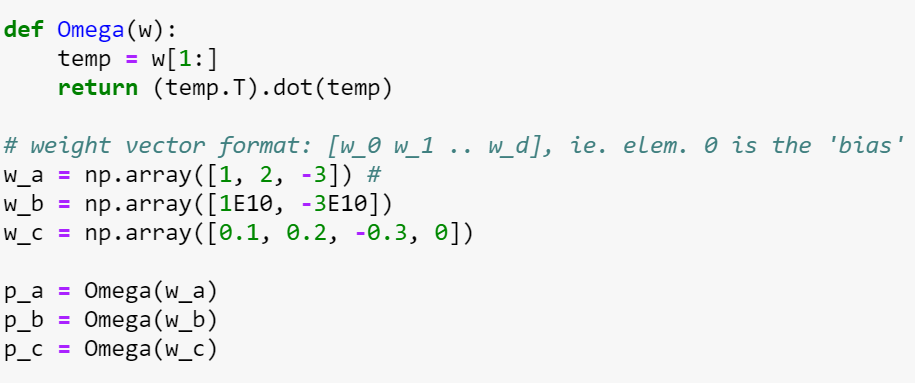




# Regulizers

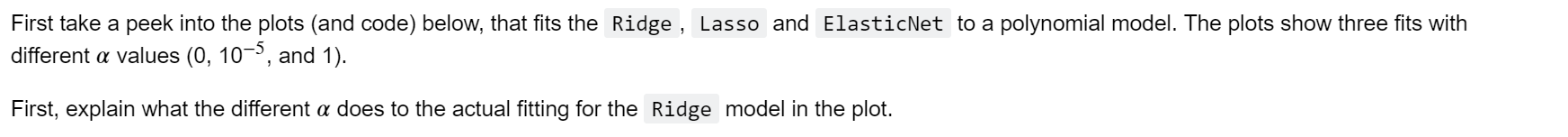
## Qa:

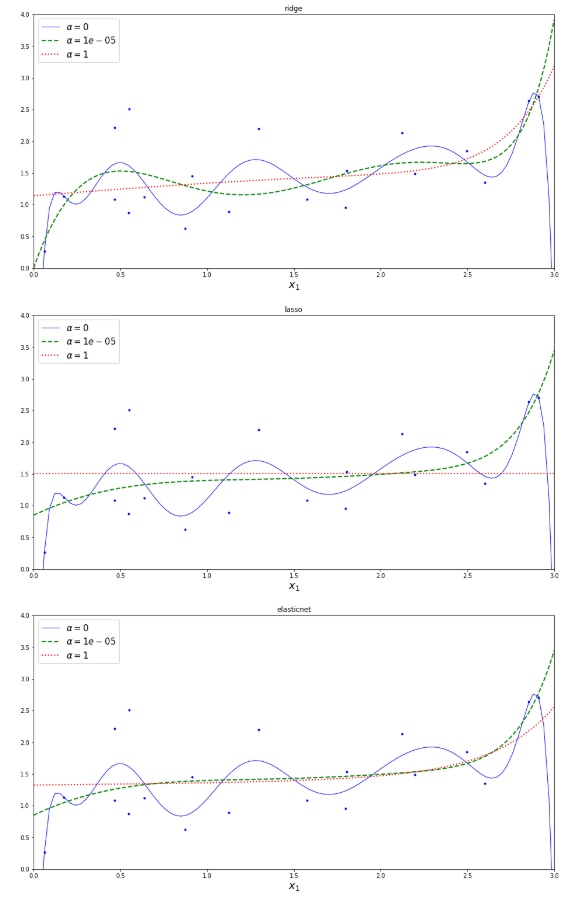


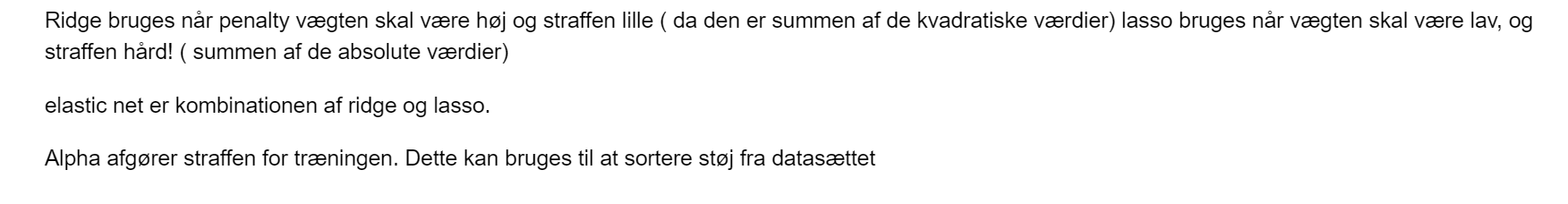




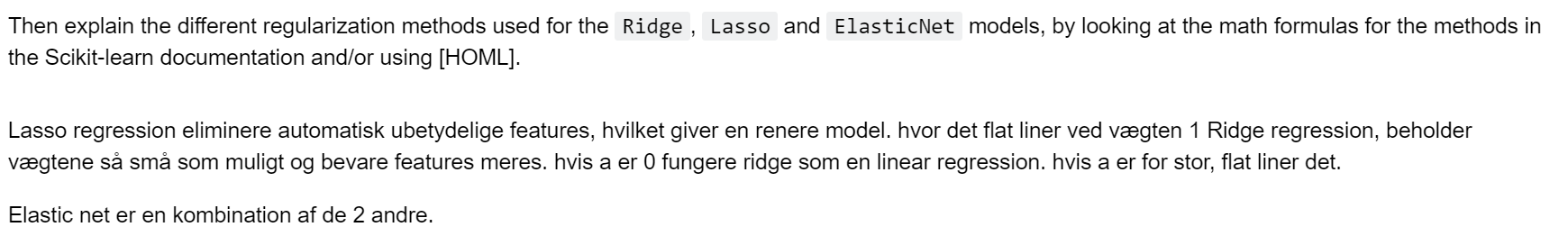
## Qb:



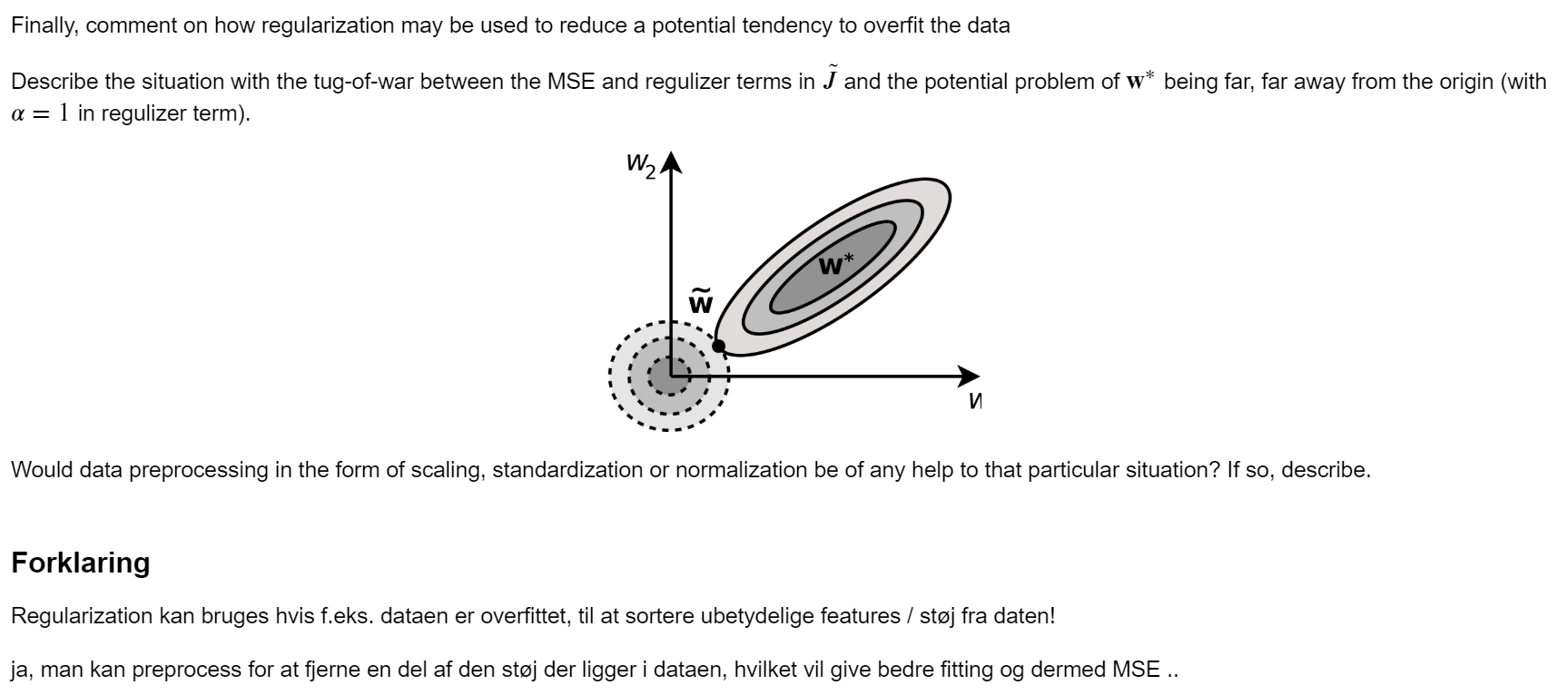




## Qc:

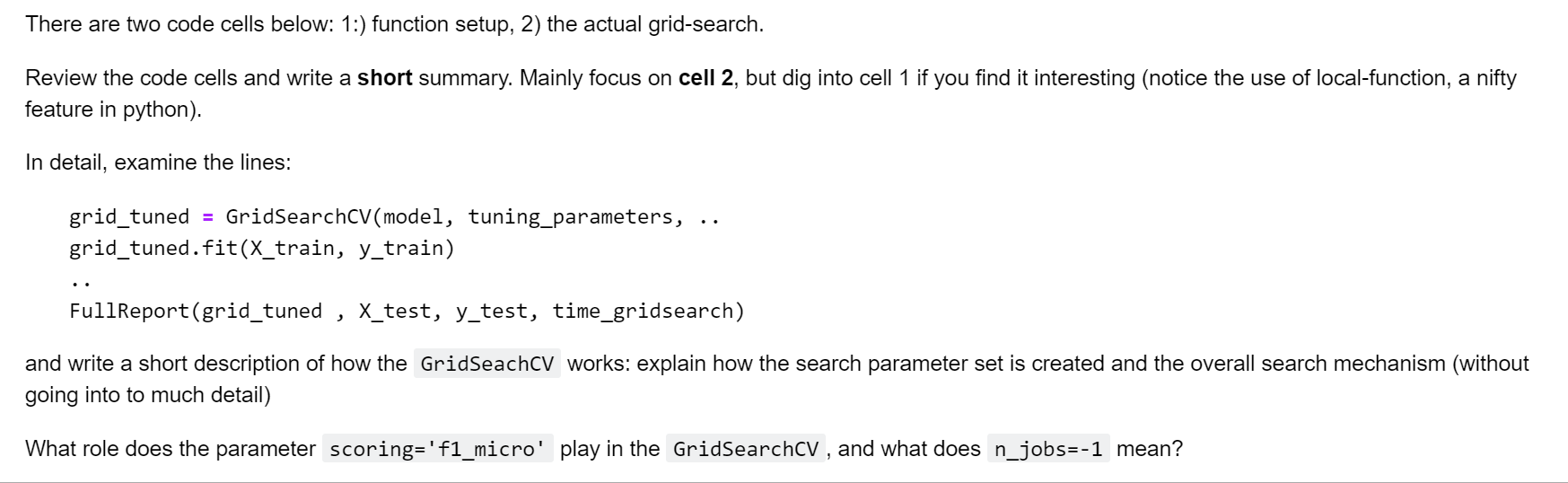


## Qd:

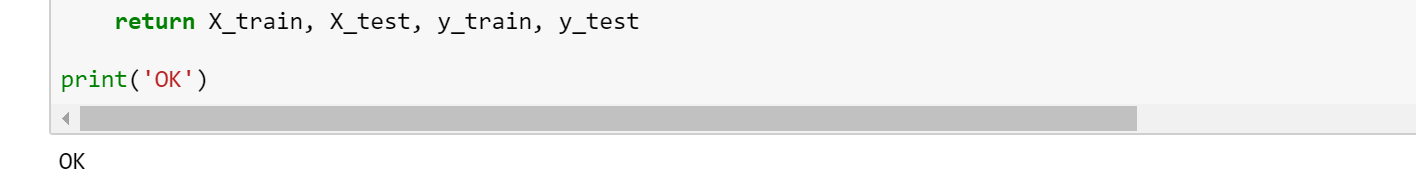


# Gridsearch

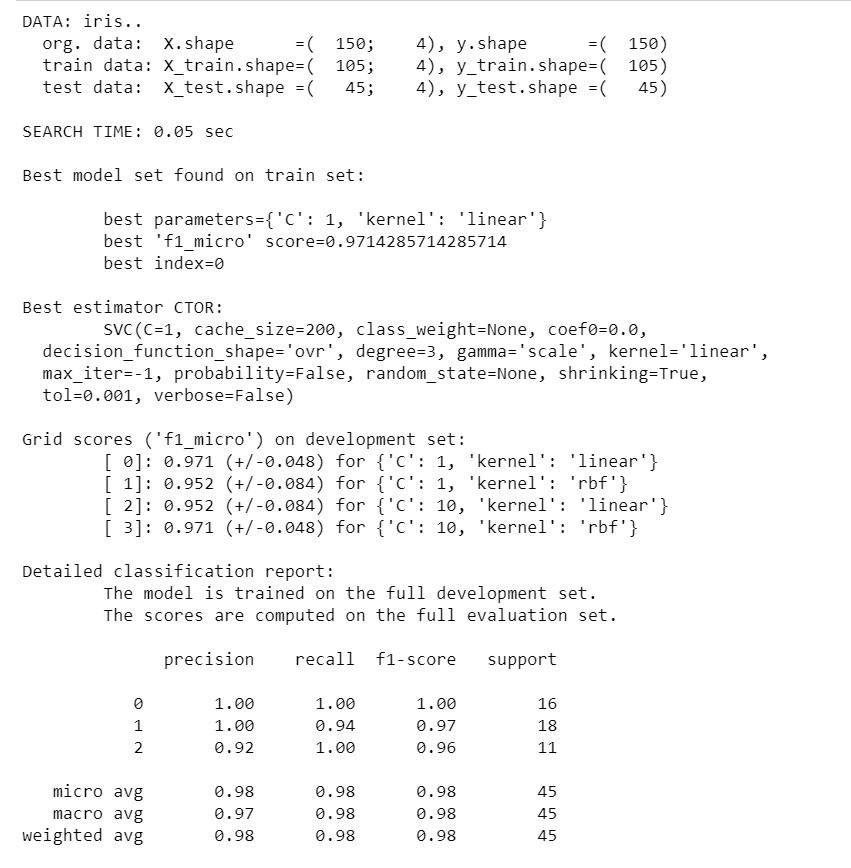
## Qa

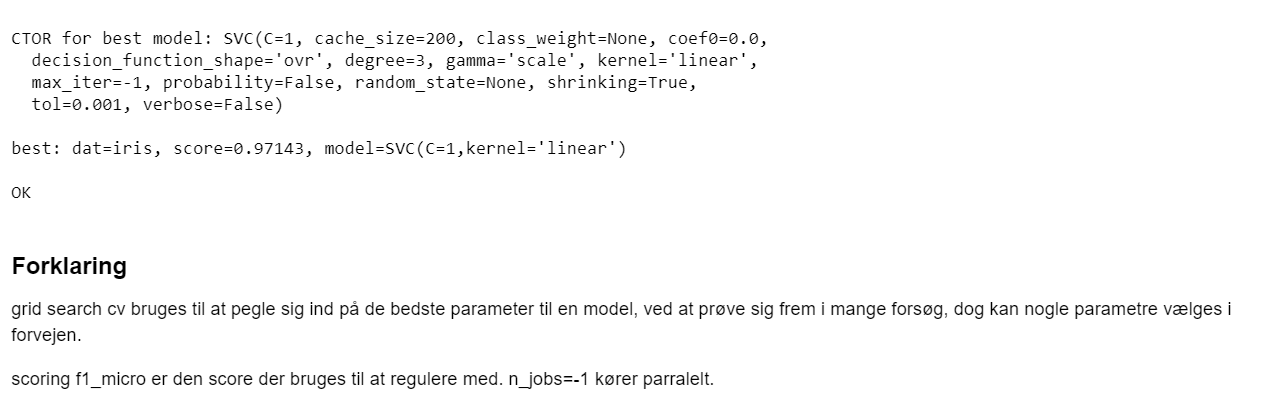


### Cell 1

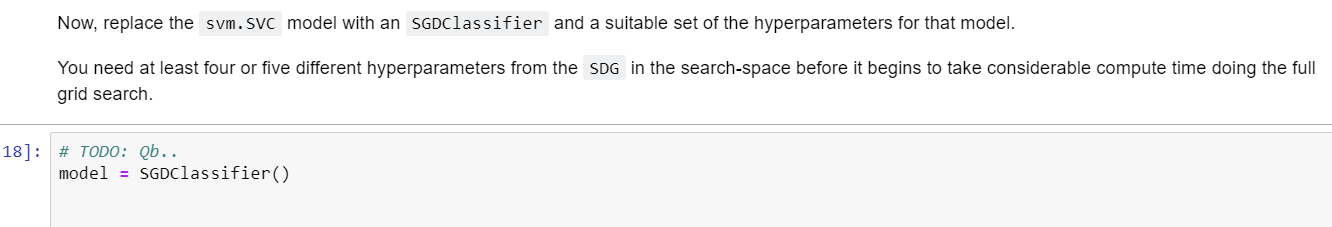


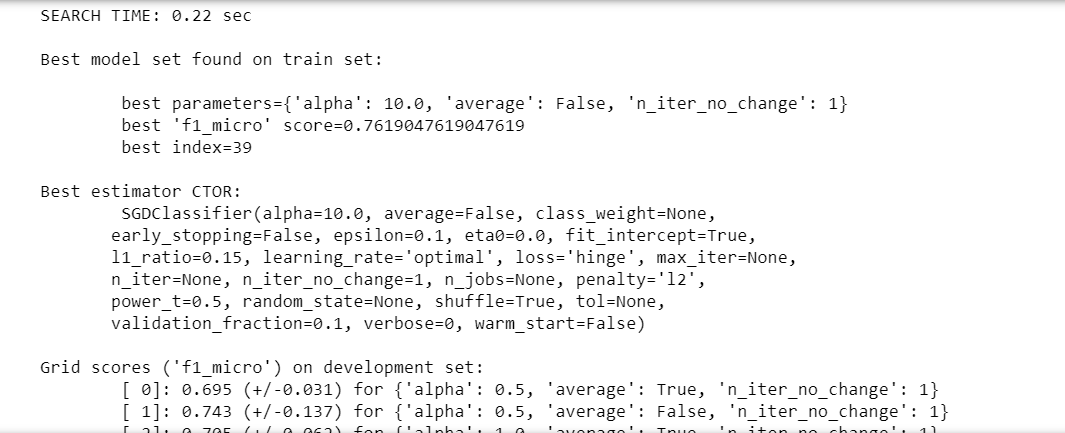
### Cell 2

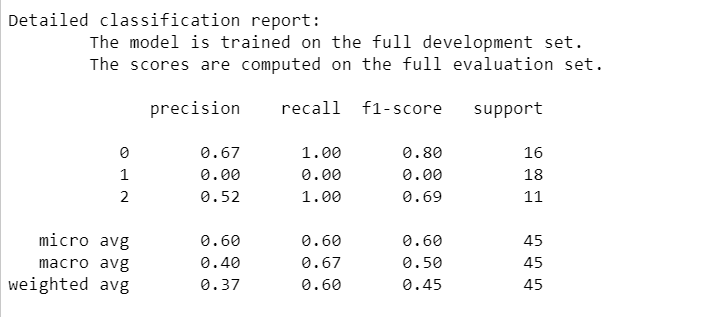


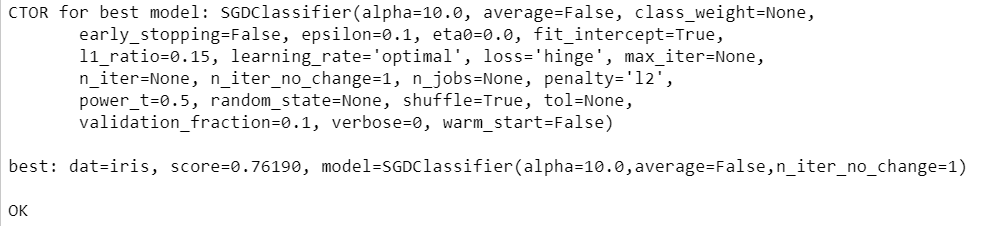


## Qb

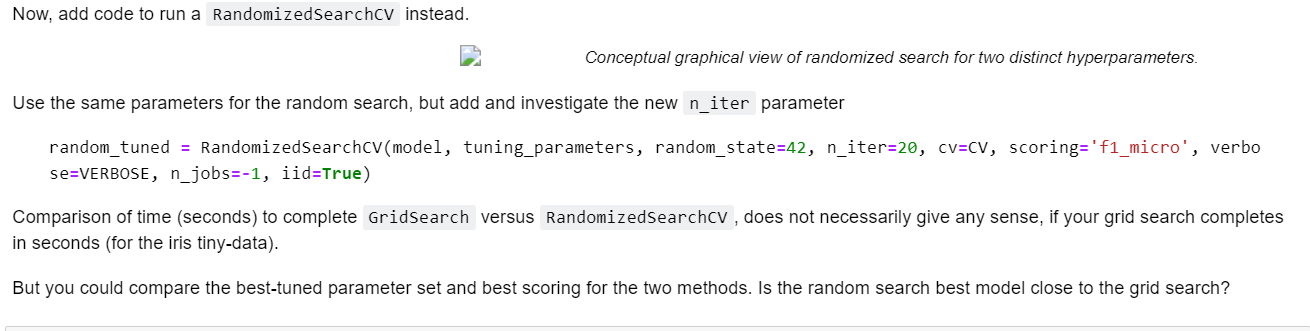




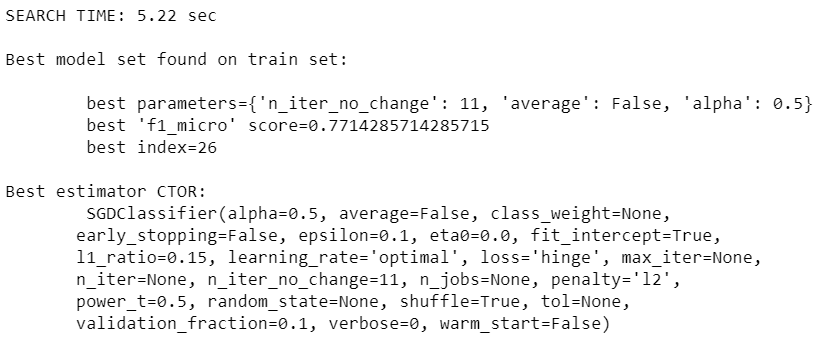


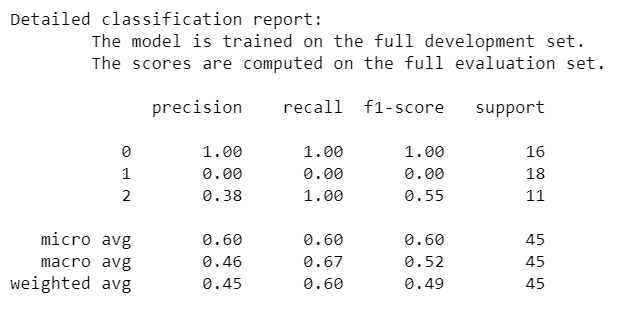


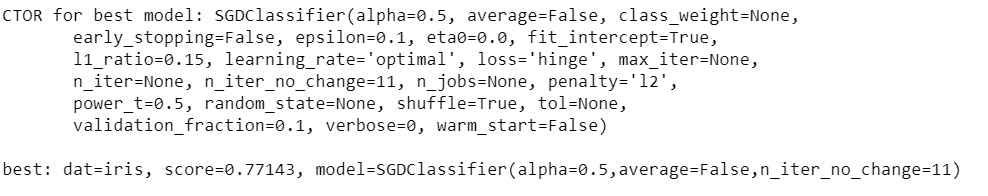
## Qc

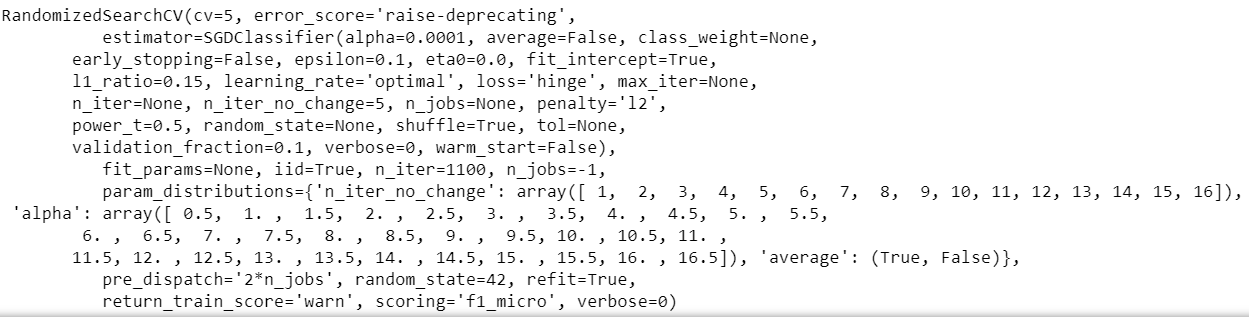




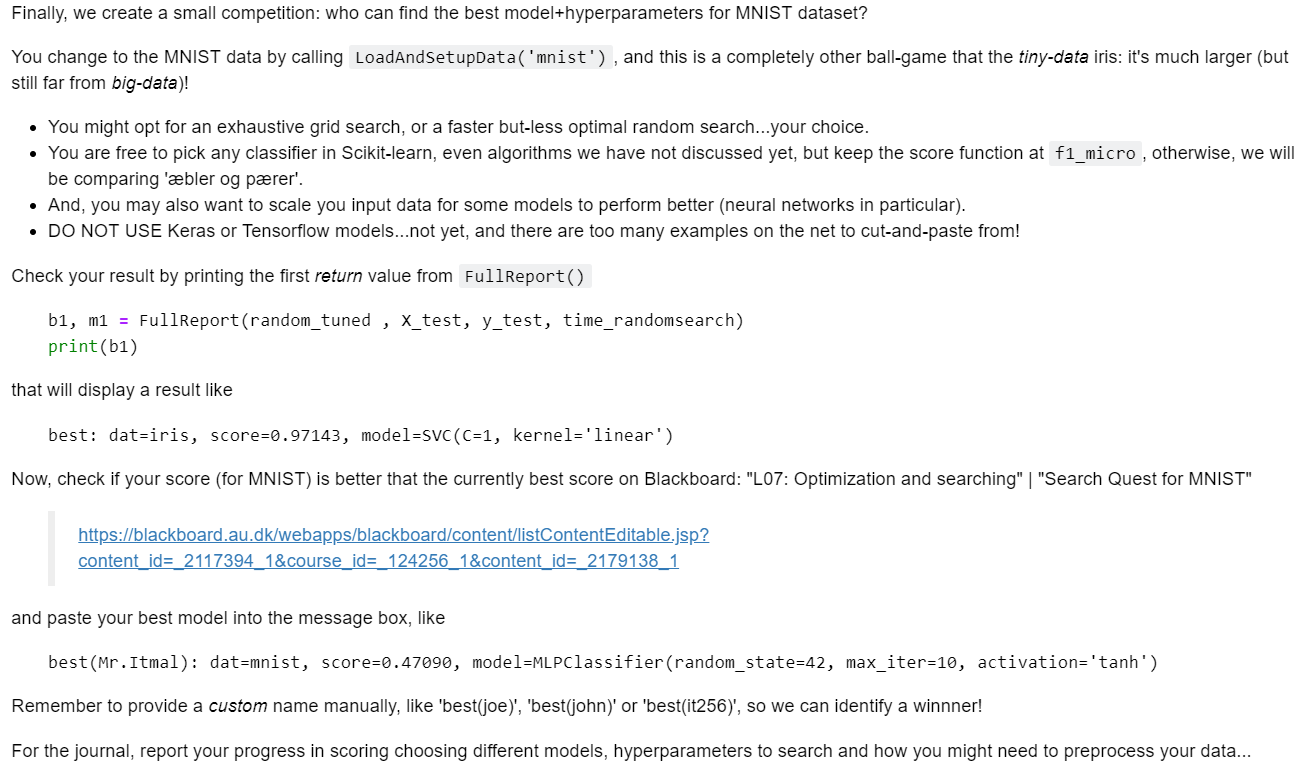


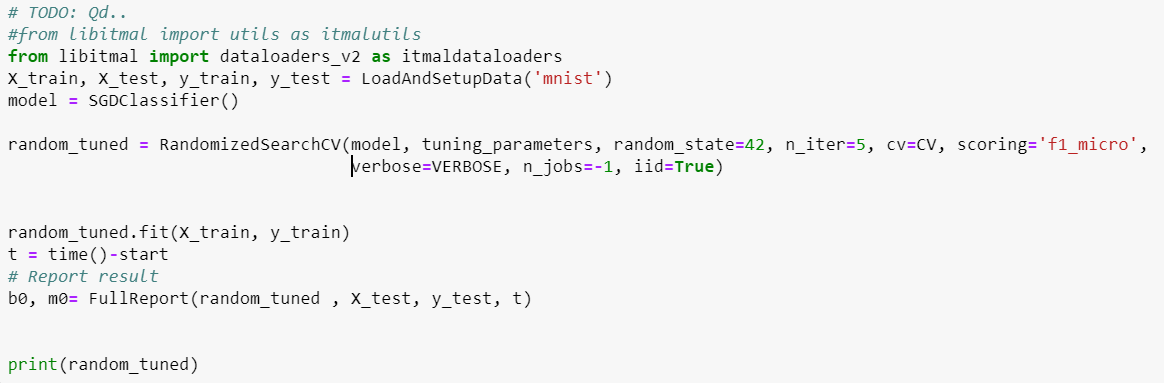


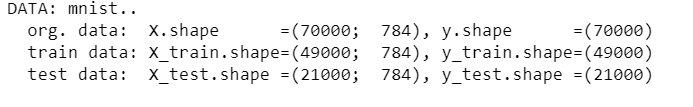


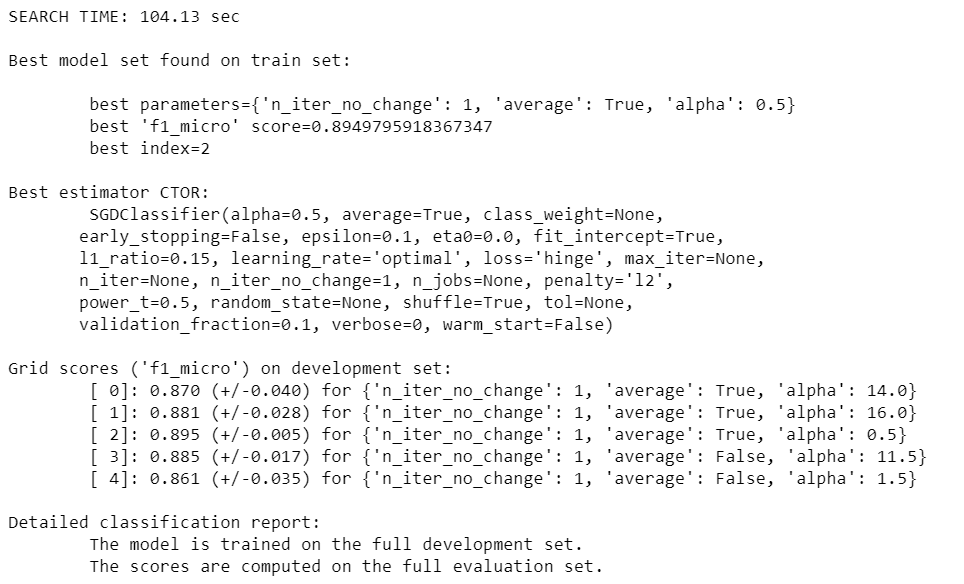


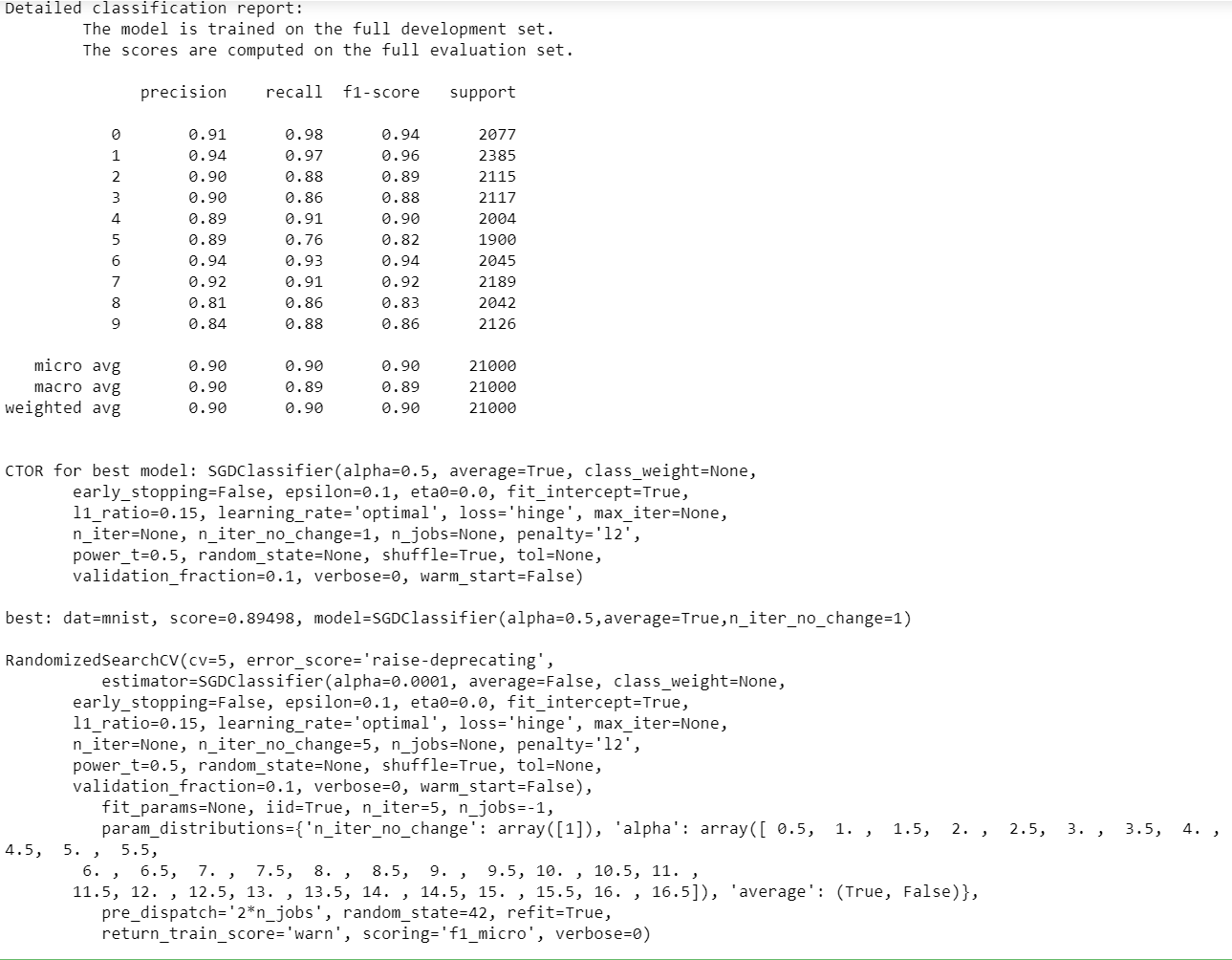
## Qd



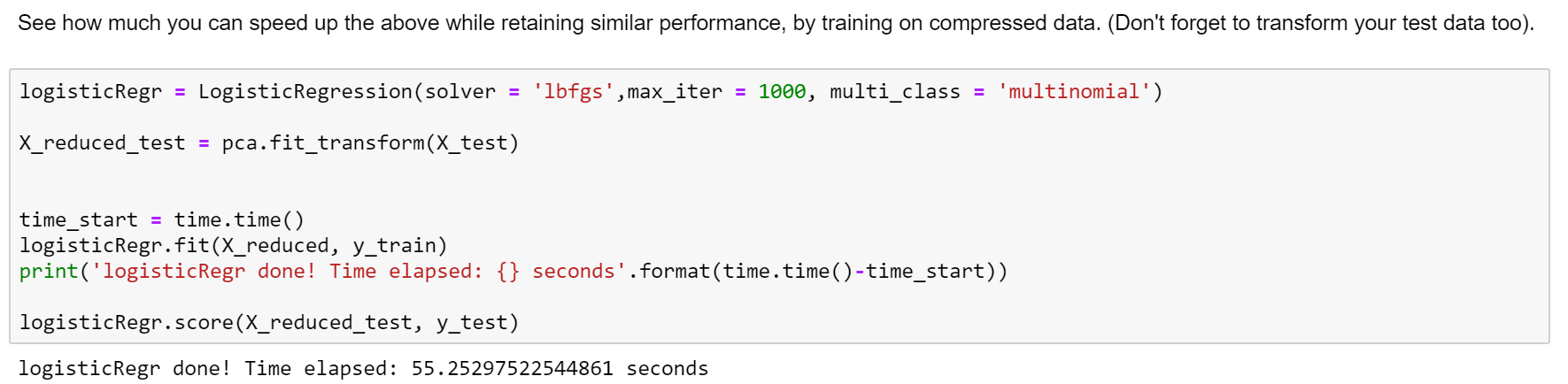


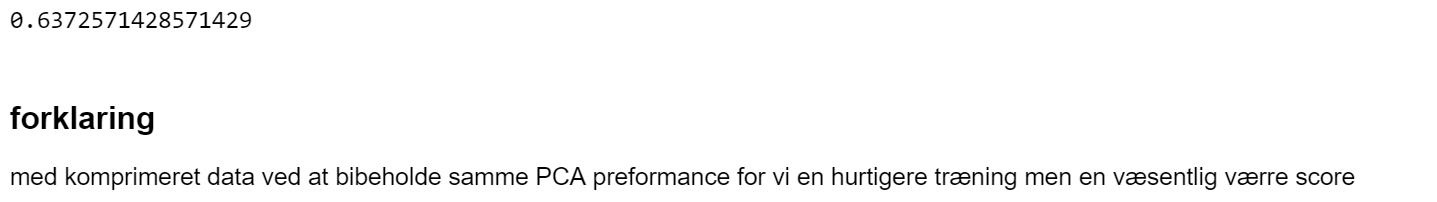




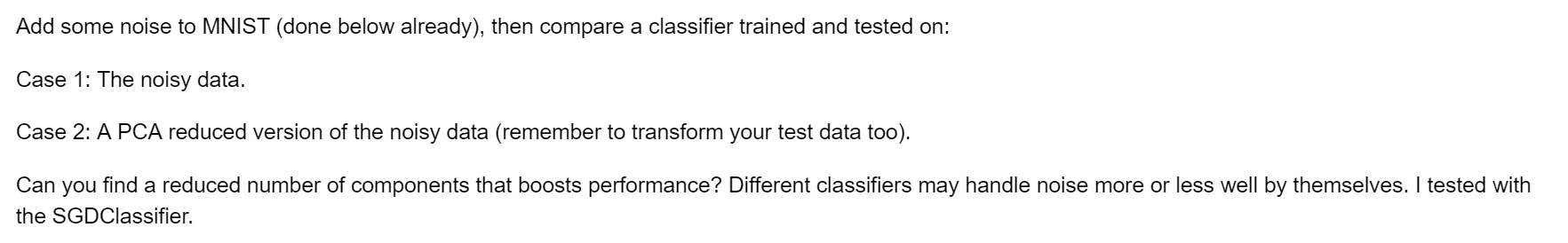


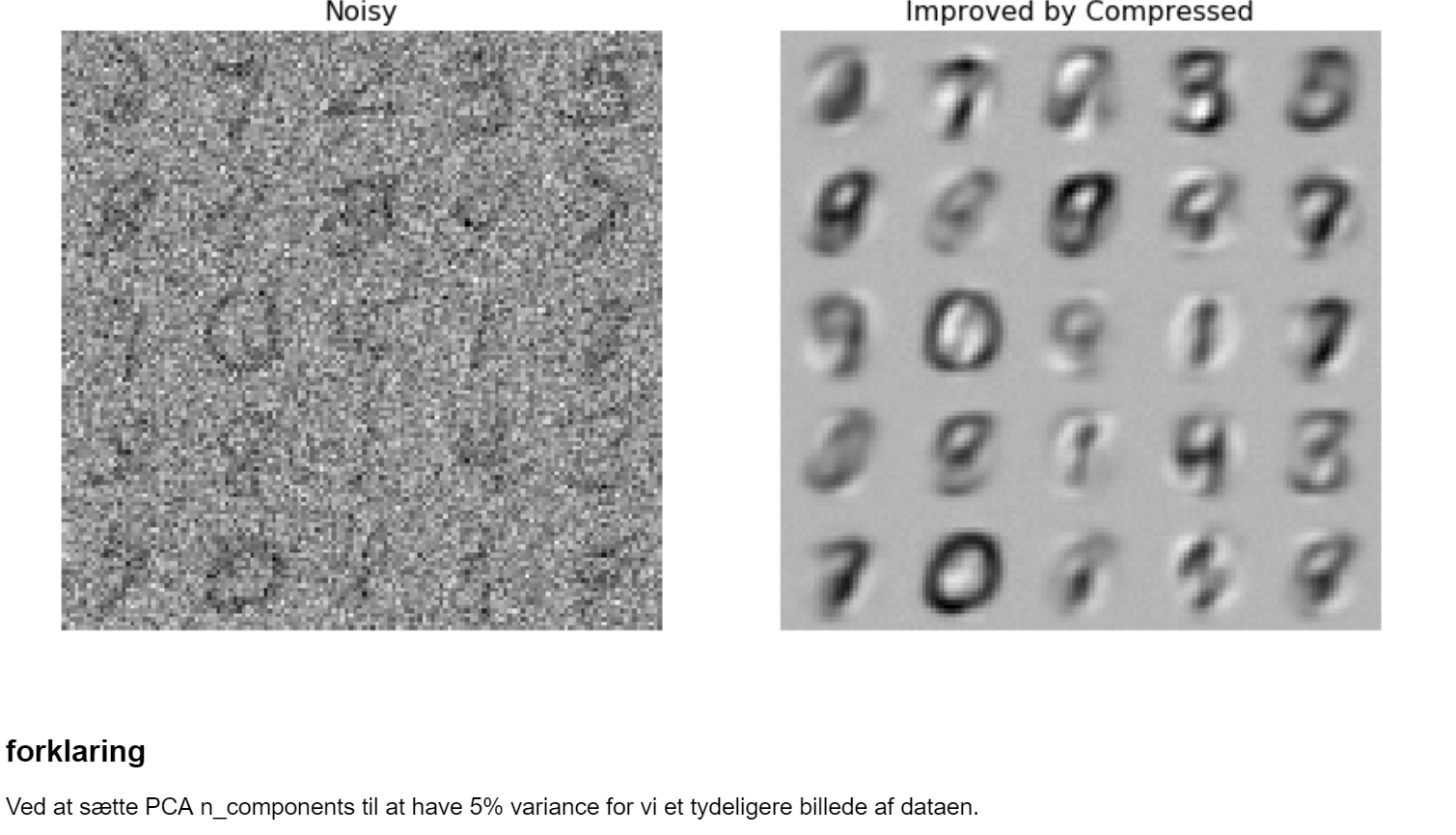
# Speed up by compression

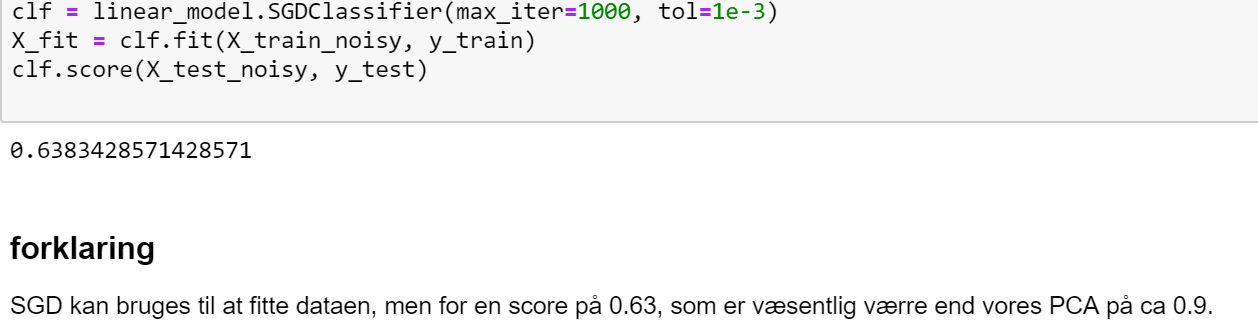




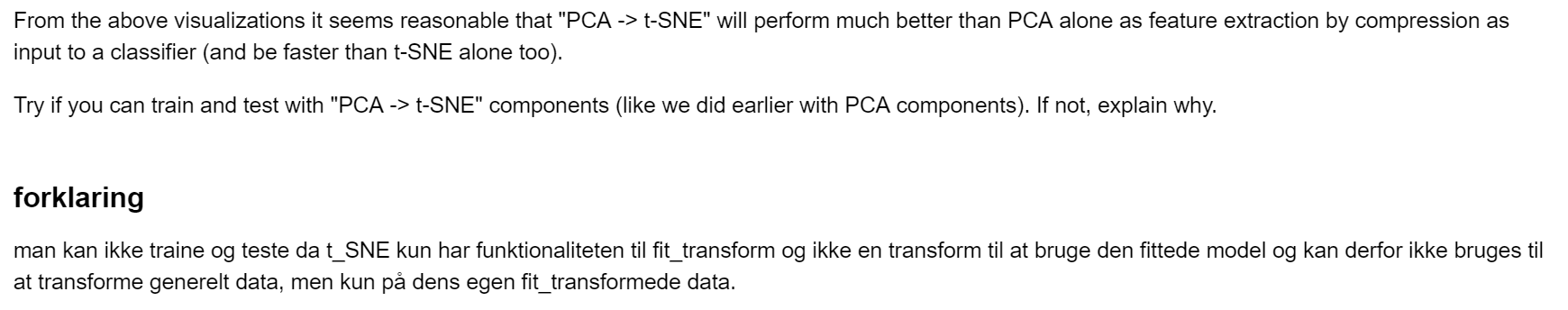
# Noise reduction





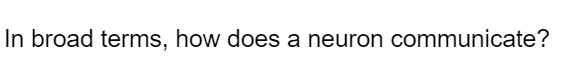


# PCA -> t-SNE features

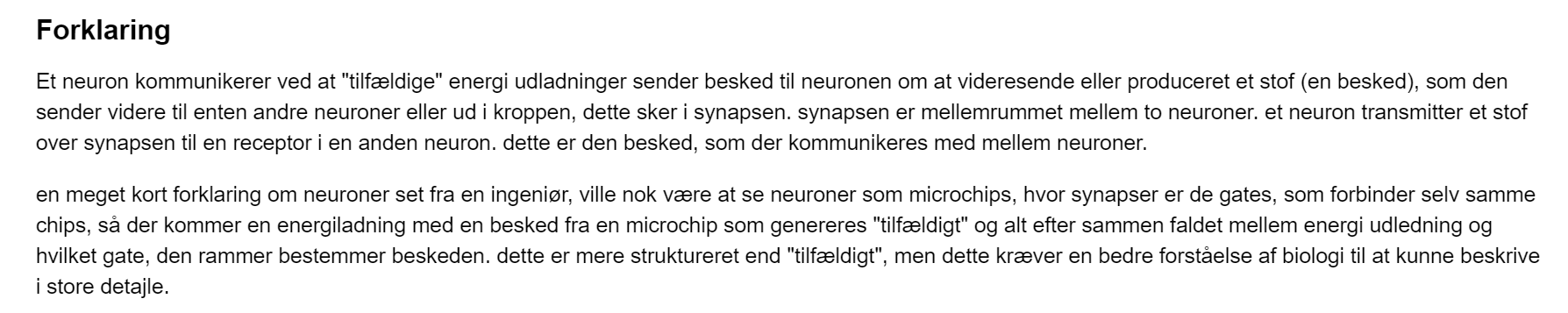


# Neurons

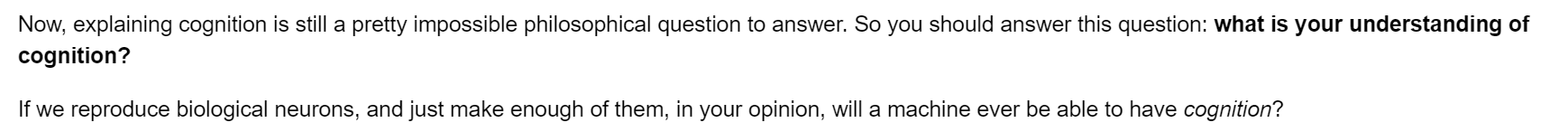
## Qa:

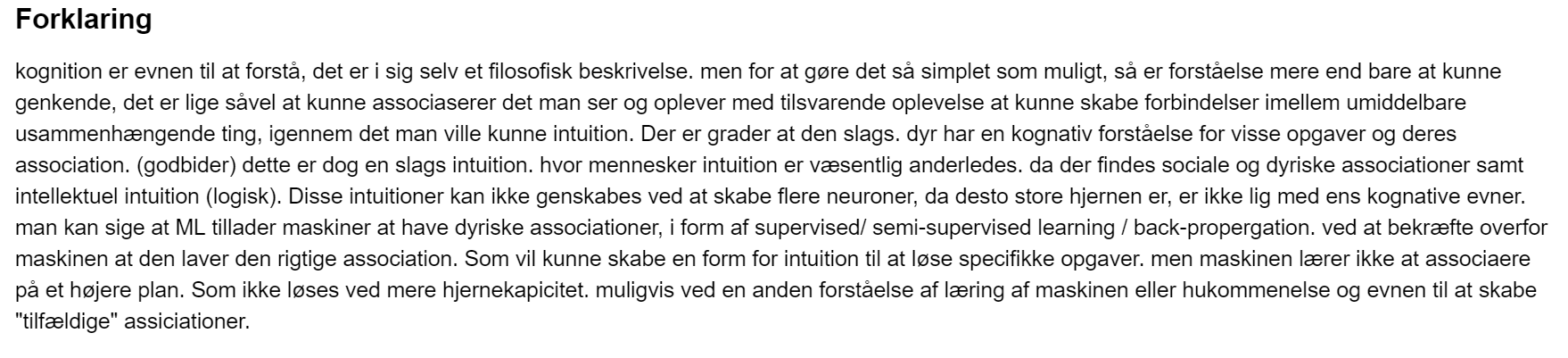






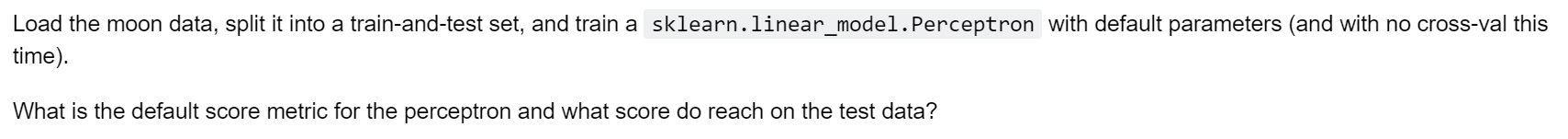
## Qb:

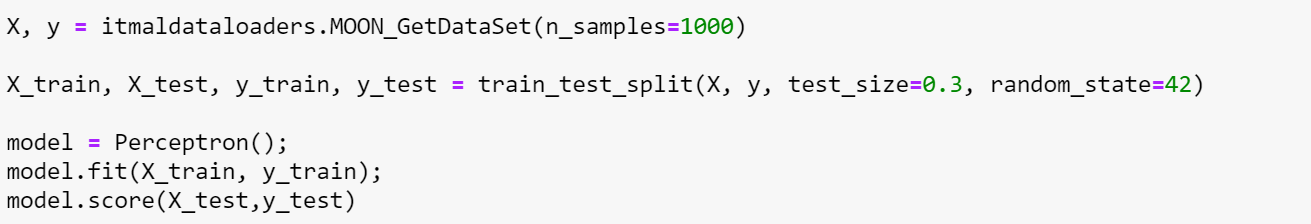


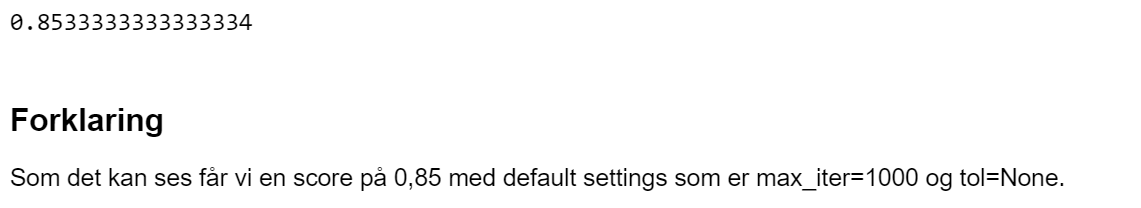


# Perceptron

## Qa:

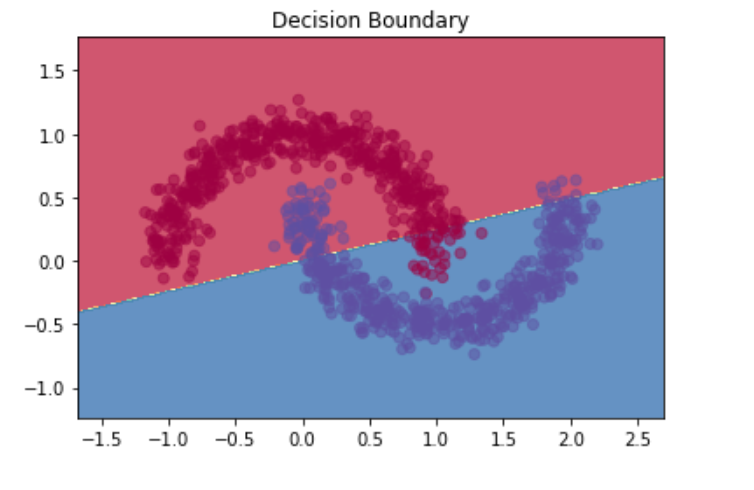




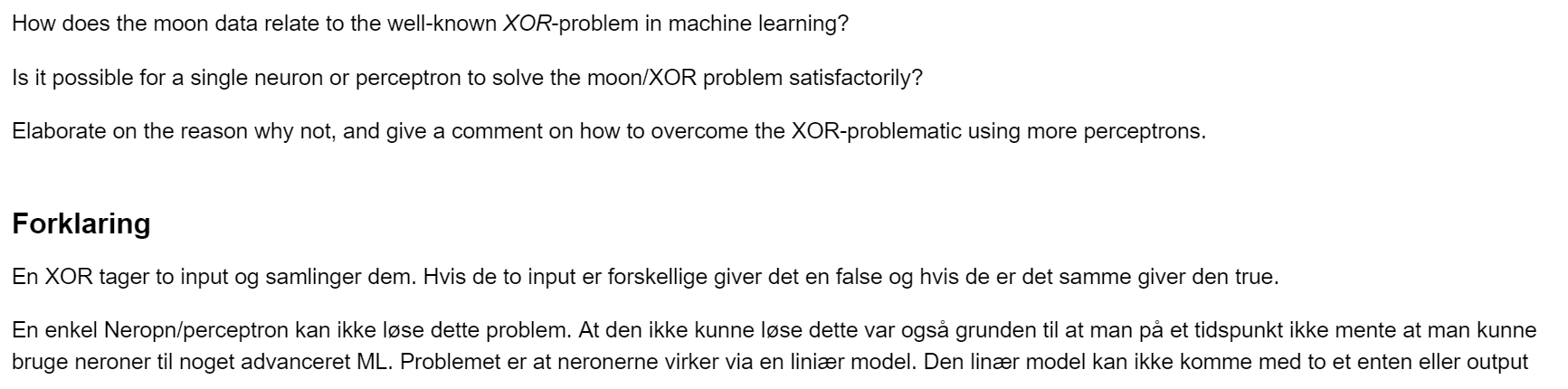


## Qb:

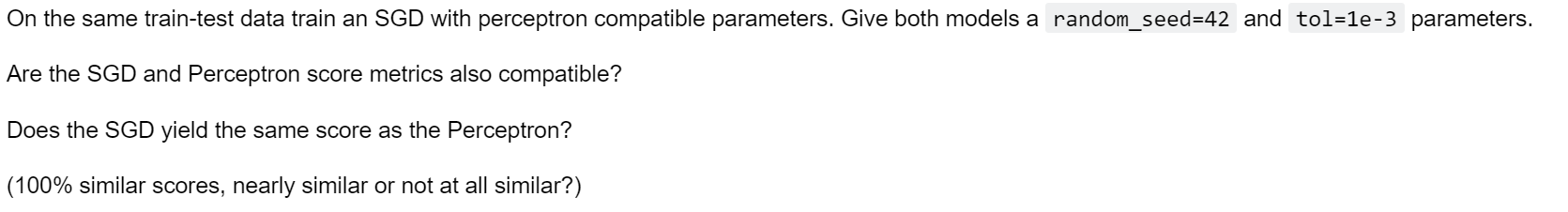


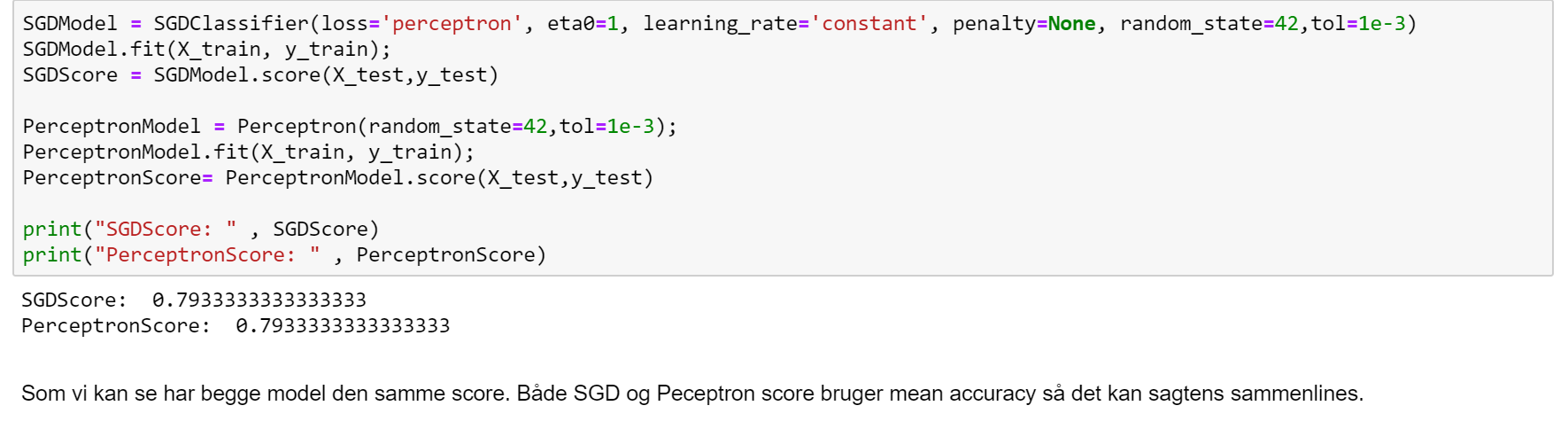


## Qc:



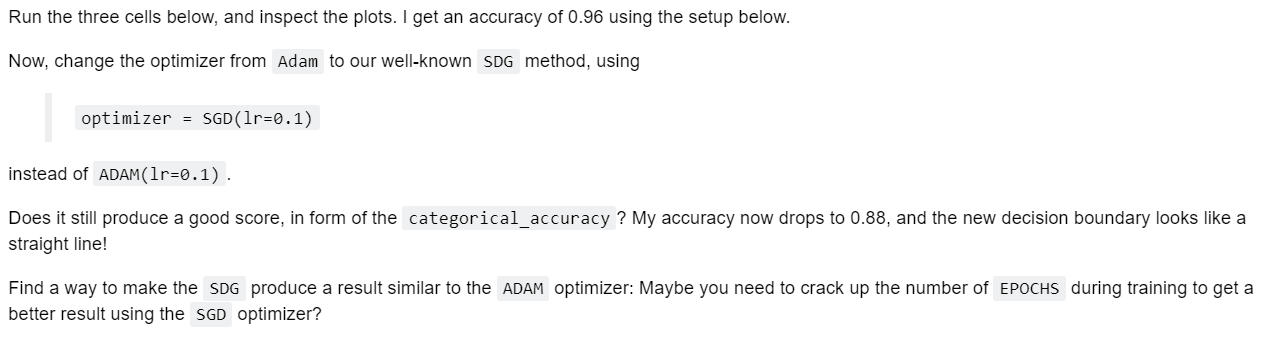
## Qd:





# Multi-layers Perceptrons (MLP)

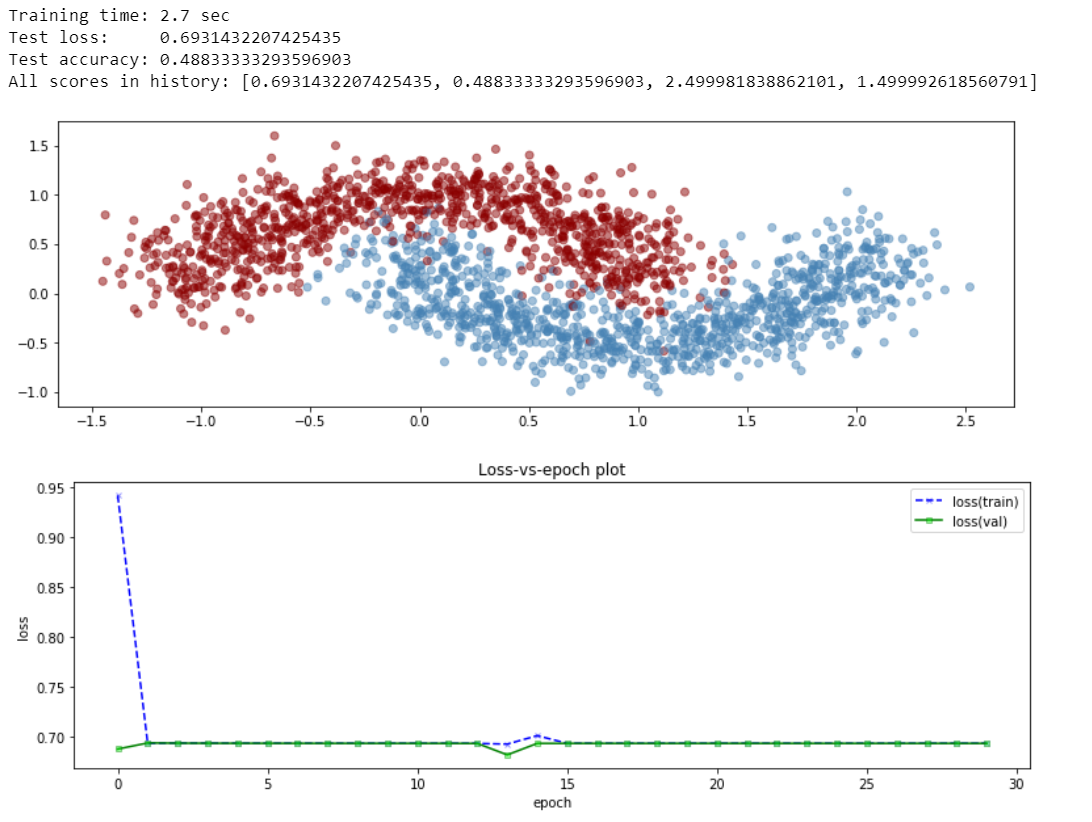
## Qa:

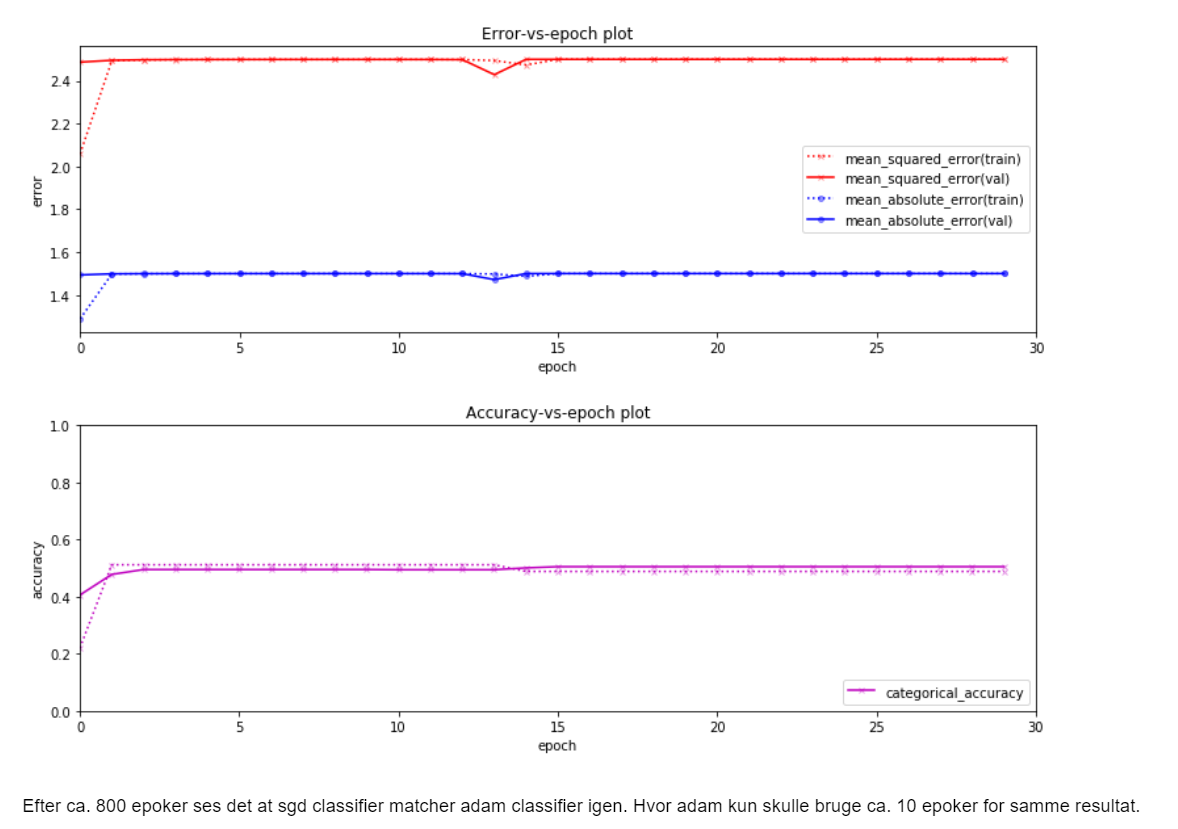


### Cell 1

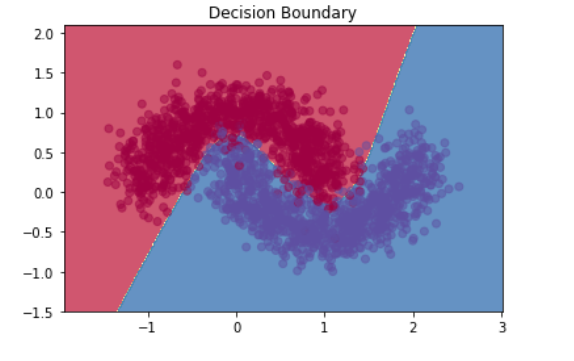


### Cell 2

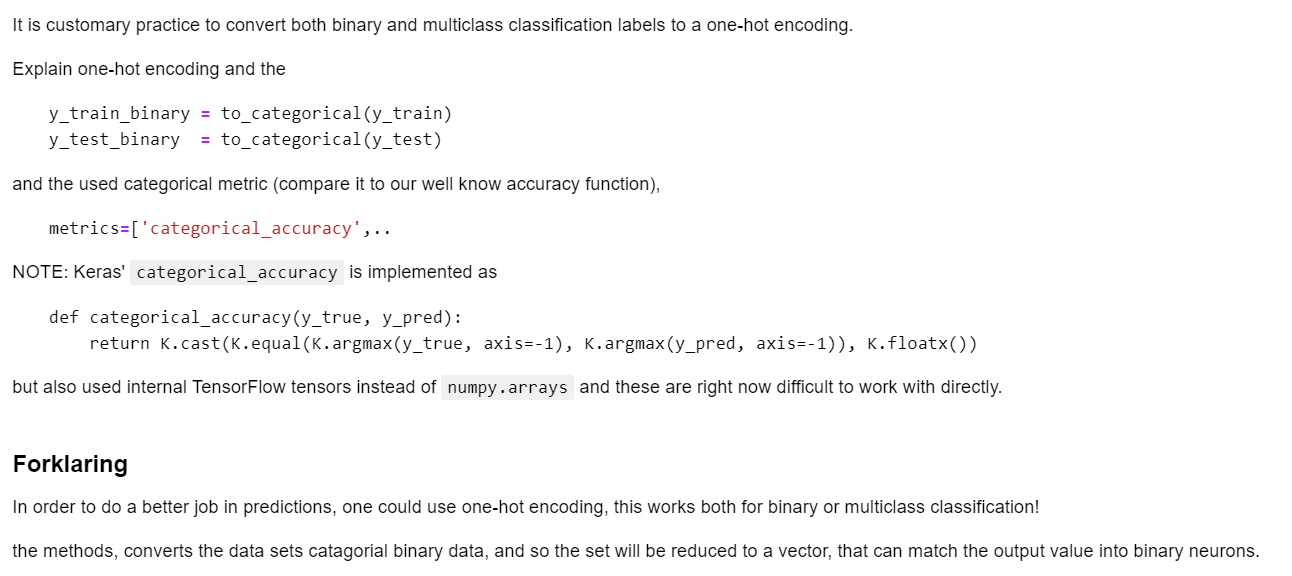




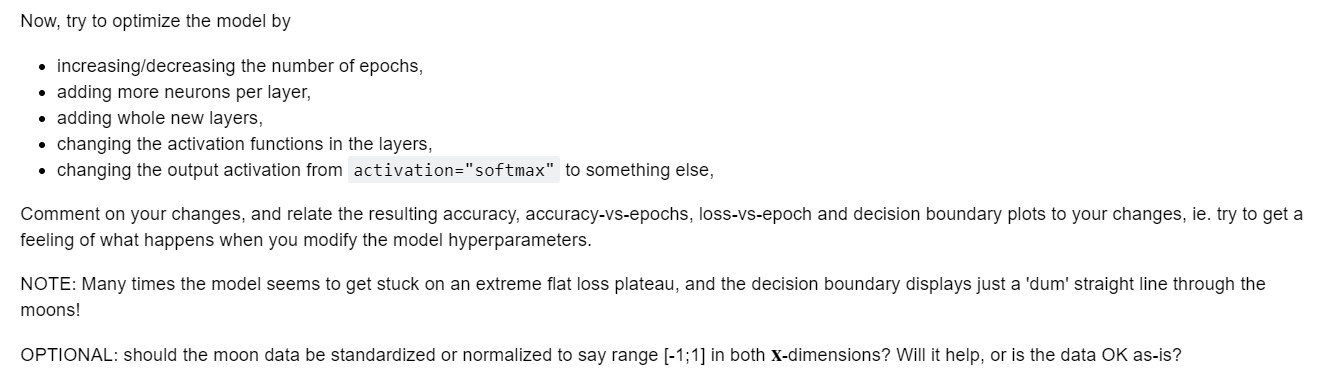
### Cell 3



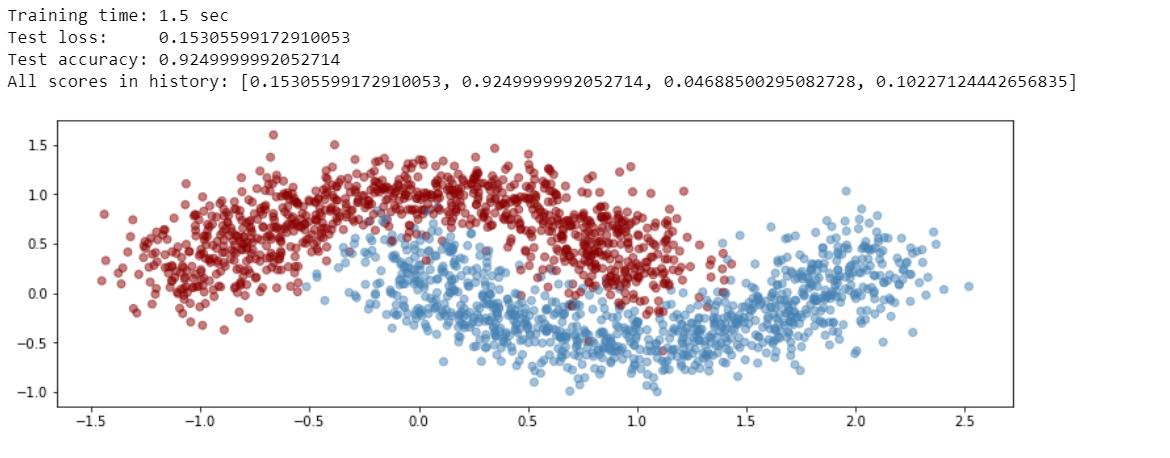
## Qb:

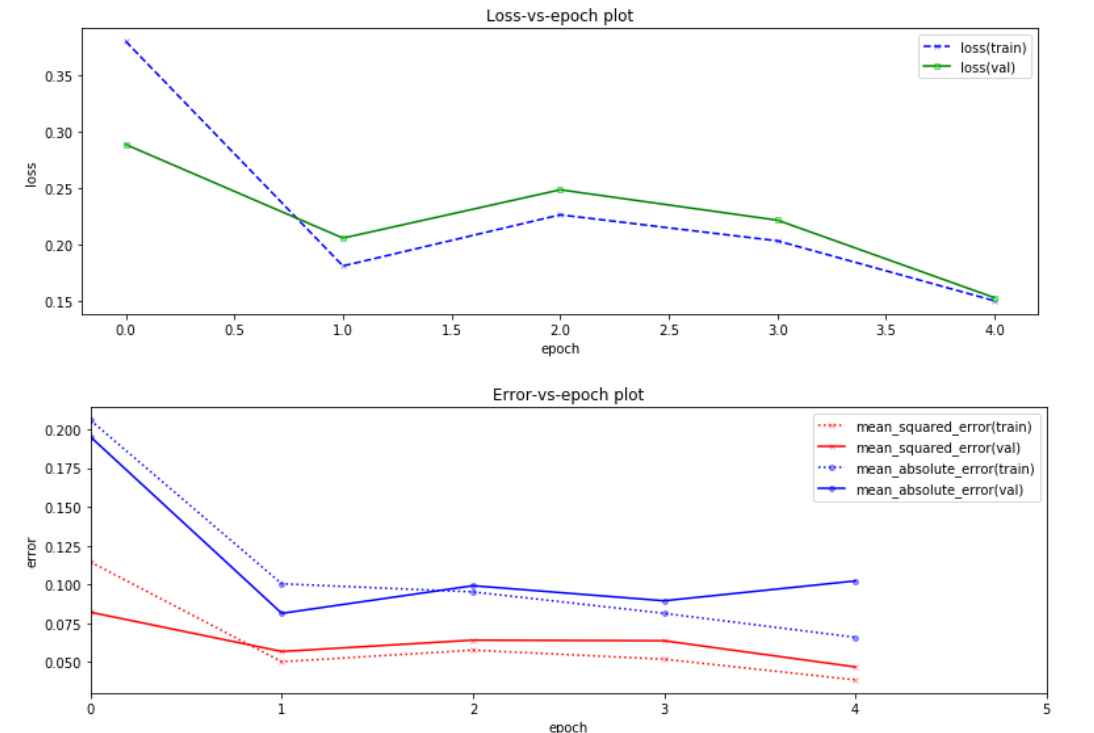


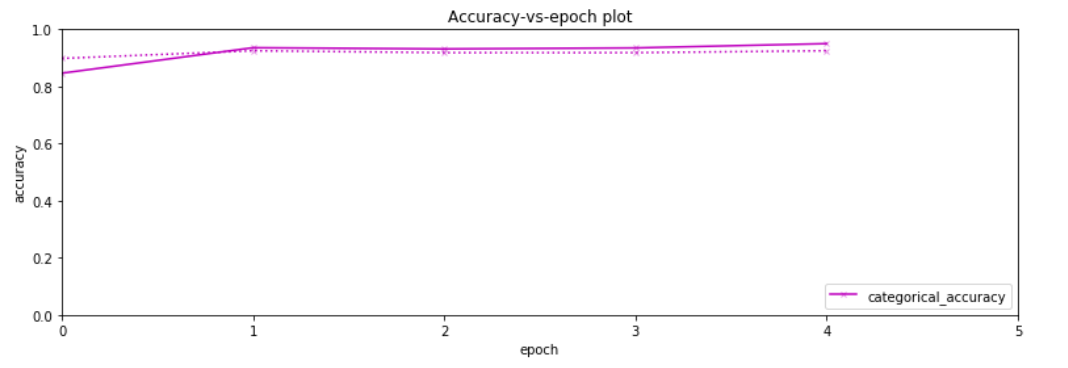
## Qc:

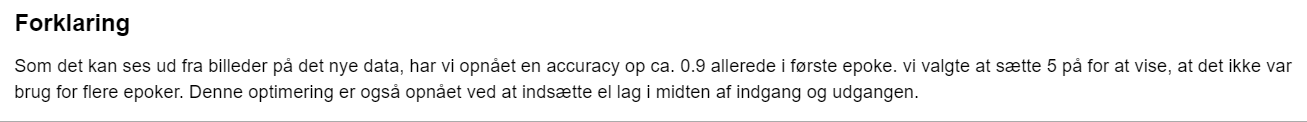






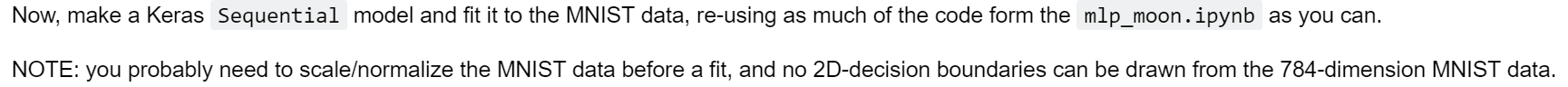




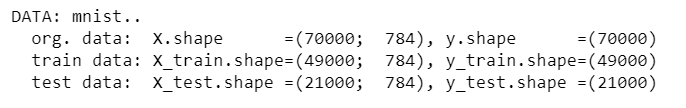


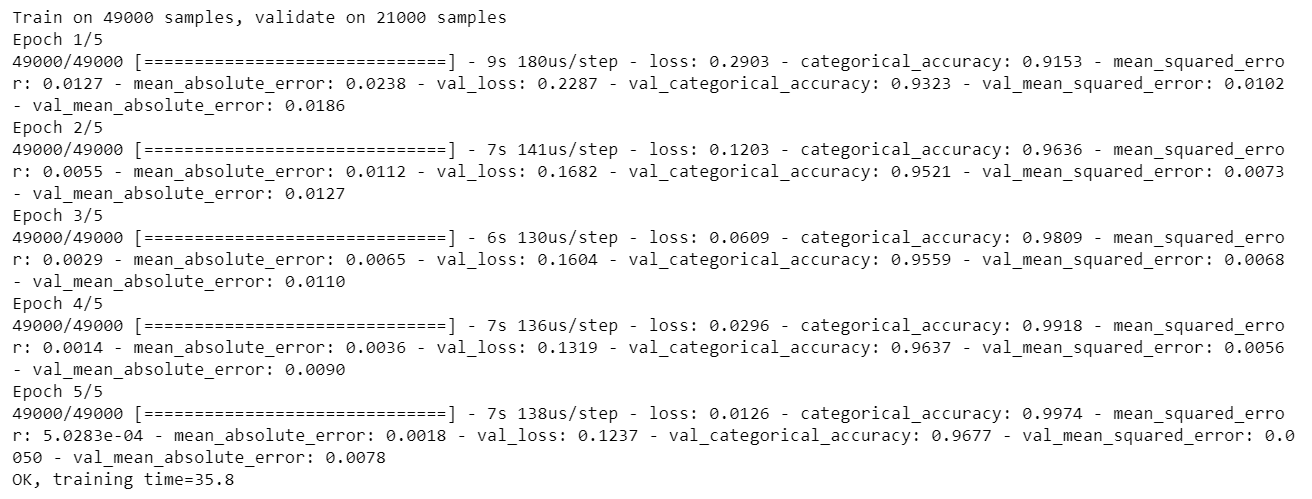
# Keras Multi-Layer Perceptrons (MLP’s) on MNIST-data

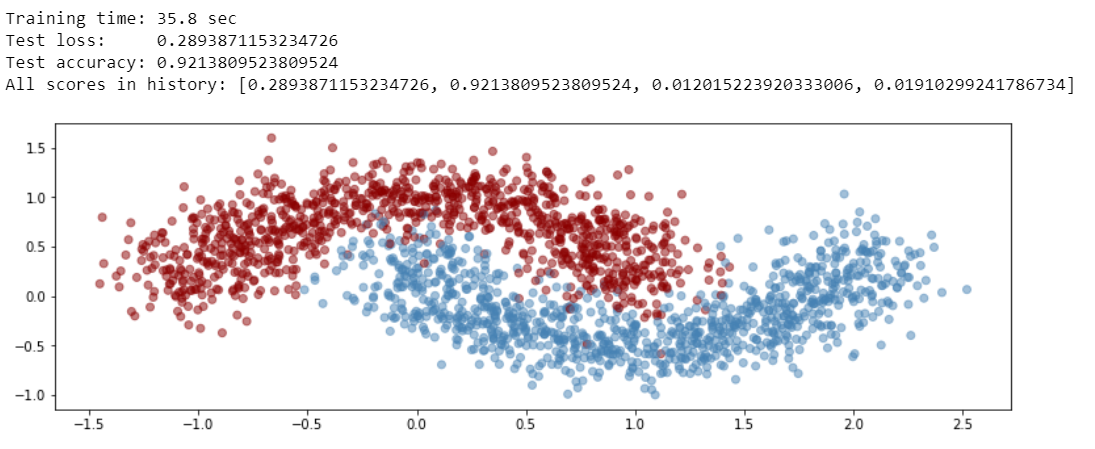
## Qa:

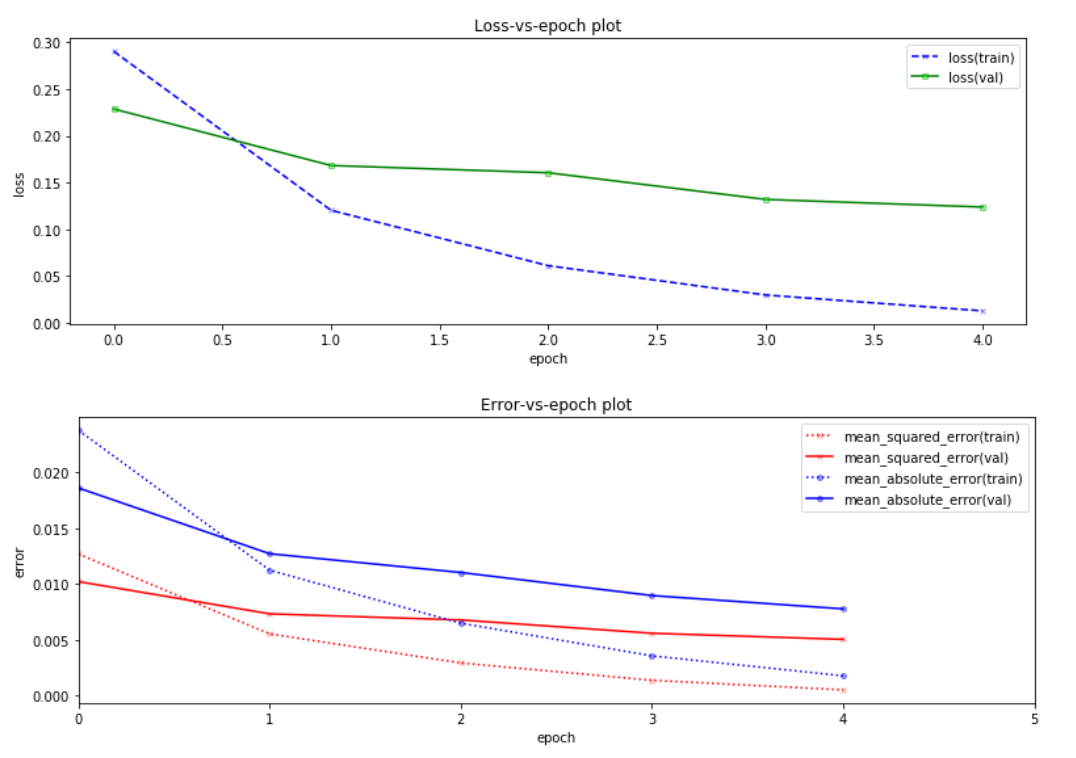


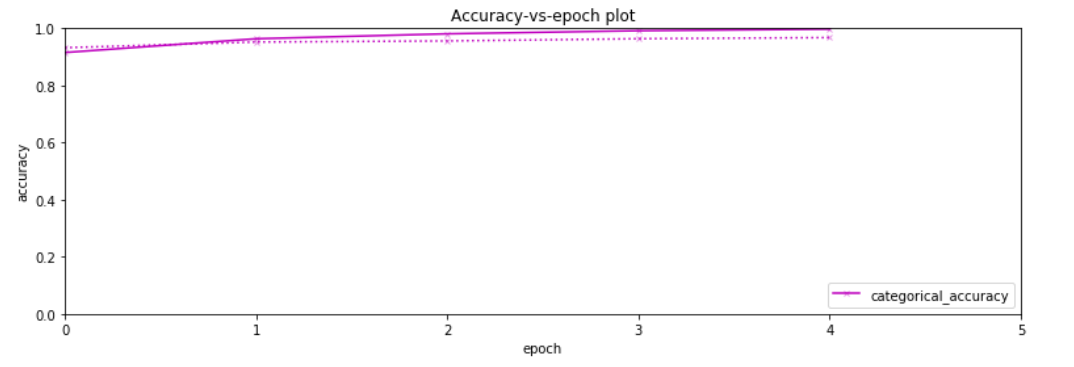




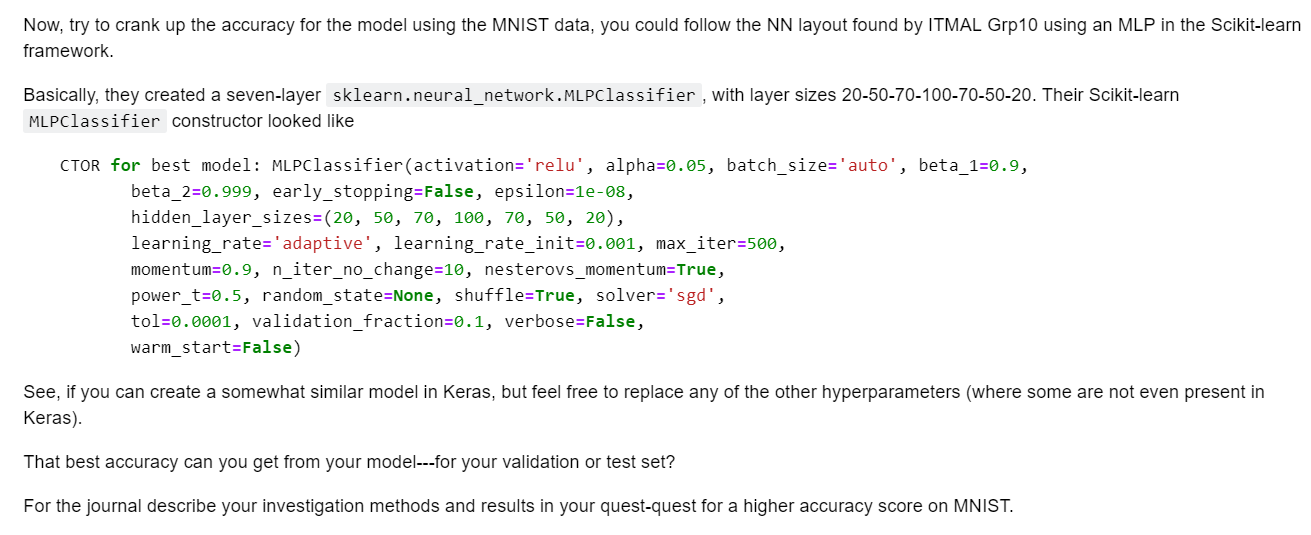








## Qb:





### 

Som der kan ses opnår vi en mean absolute error på 0.0013 som må siges at være ret godt. Og tæt på de 100 % som gruppe 10 havde lavet