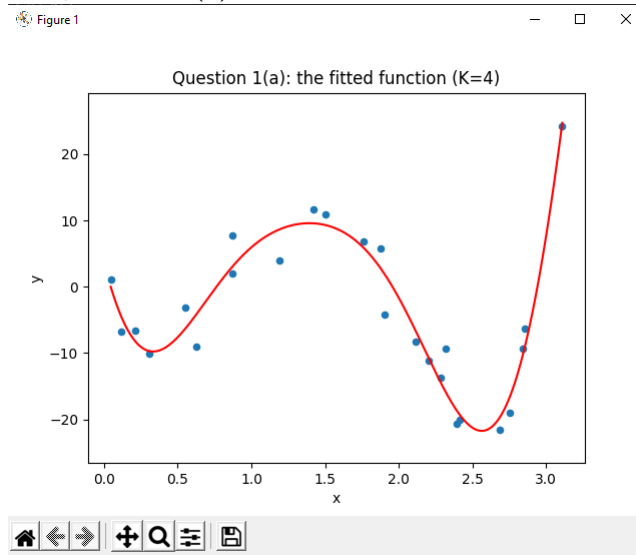


CSC311 A2 Printed Outputs

David Pham: 1002597825

Nov 15 2020

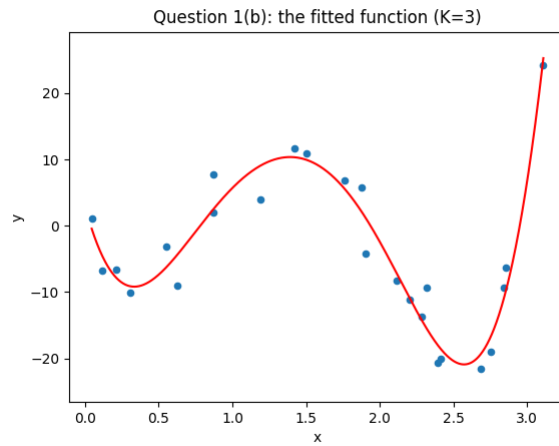
Question 1(a)



Question 1(b)

Figure 1

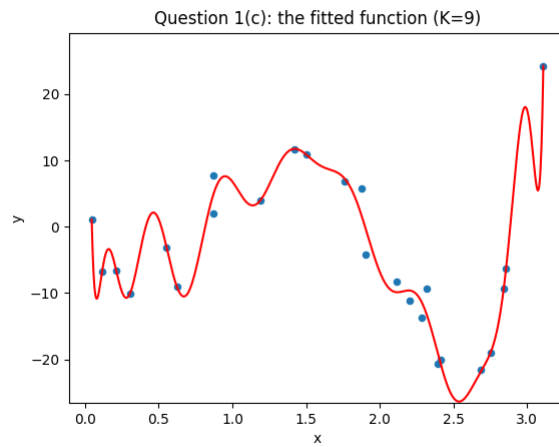
— □ ×



Question 1(c)

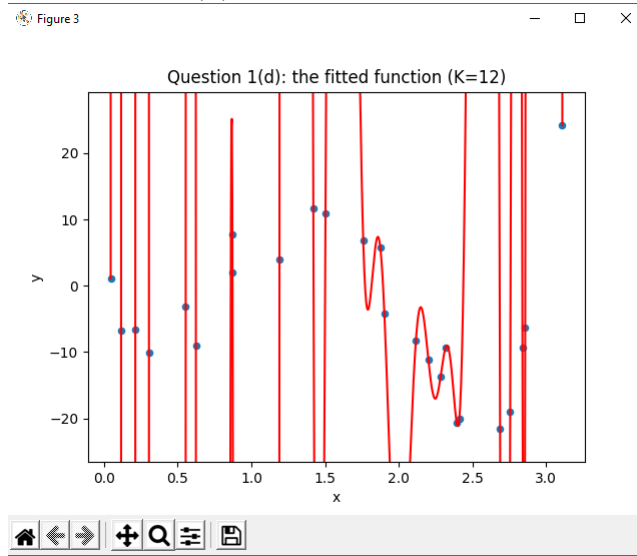
Figure 2

— □ ×



x = -0.026 y = 23.9

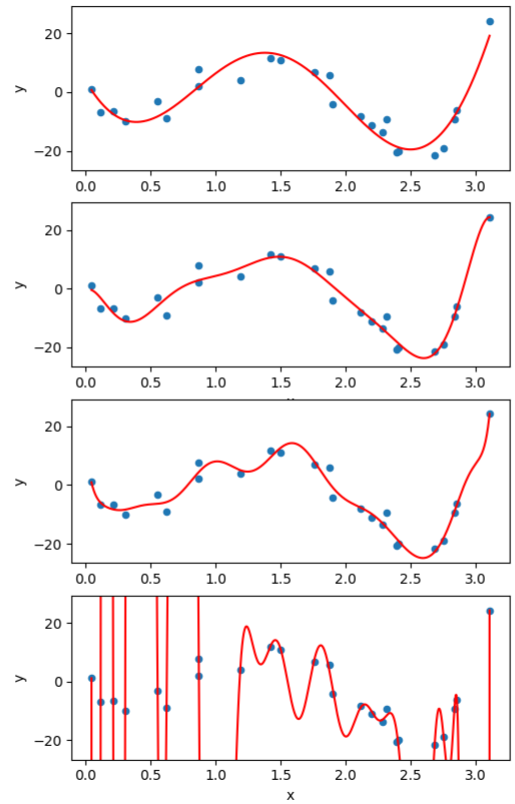
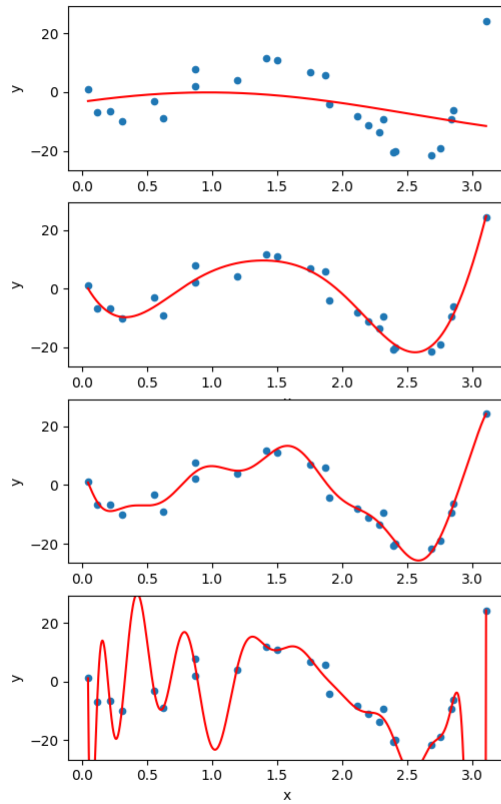
Question 1(d)



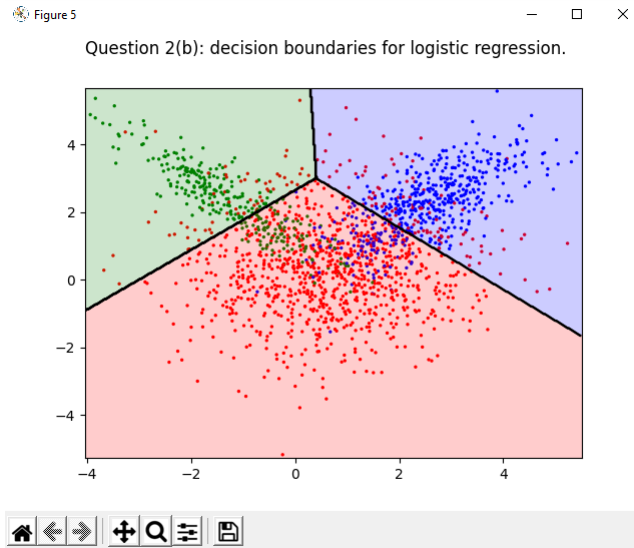
Question 1(e)

Figure 4

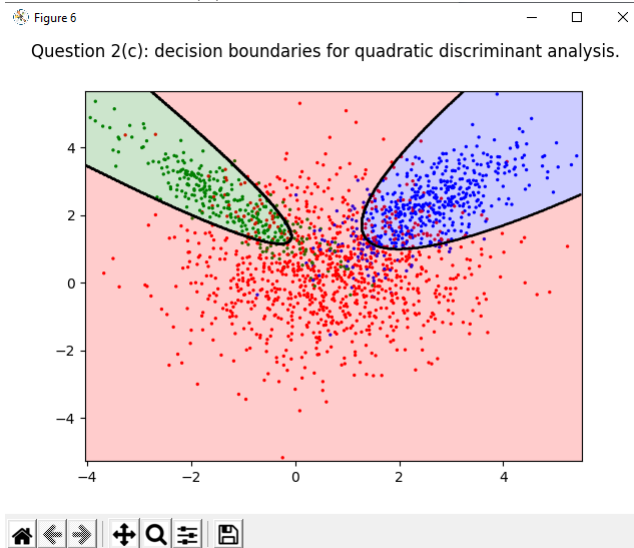
Question 1(e): fitted functions for many values of K .



Question 2(b)



Question 2(c)

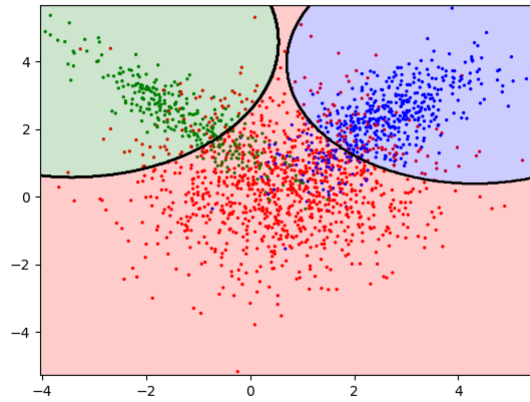


Question 2(d)

Figure 7

— □ ×

Question 2(d): decision boundaries for Gaussian naive Bayes.

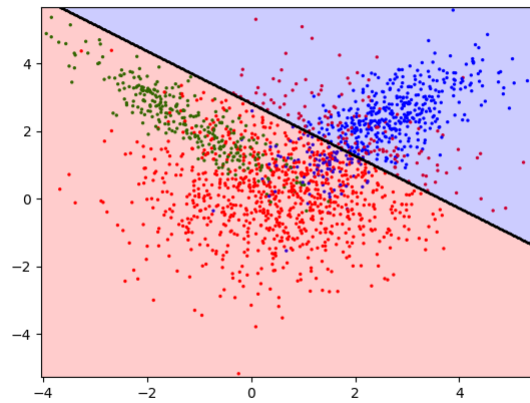


Question 3(b)

Figure 8

— □ ×

Question 3(b): Neural net with 1 hidden unit.



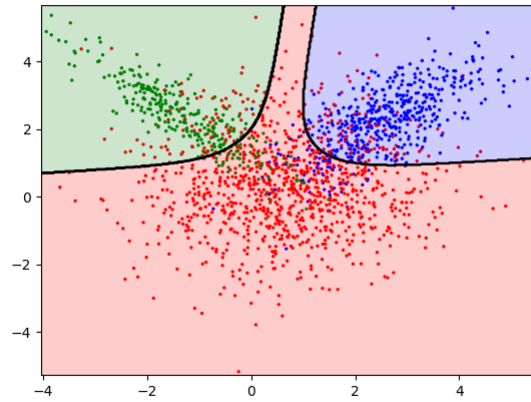
x=-2.23 y=1.22

Question 3(c)

Figure 9

— □ ×

Question 3(c): Neural net with 2 hidden units.

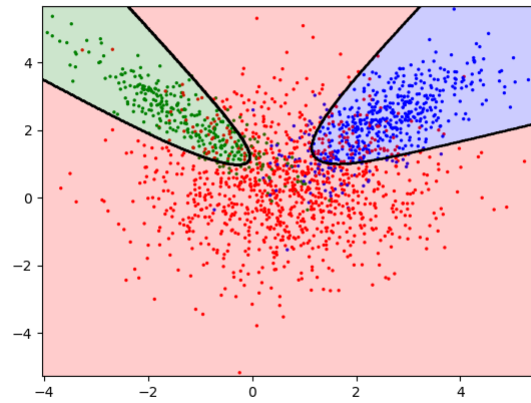


Question 3(d)

Figure 10

— □ ×

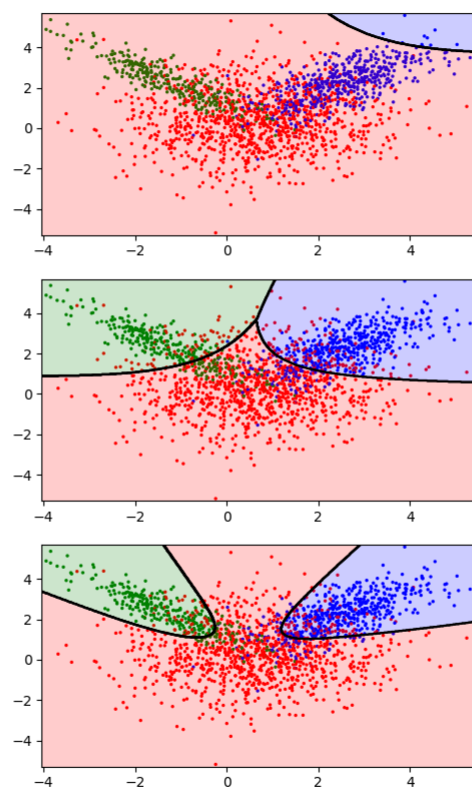
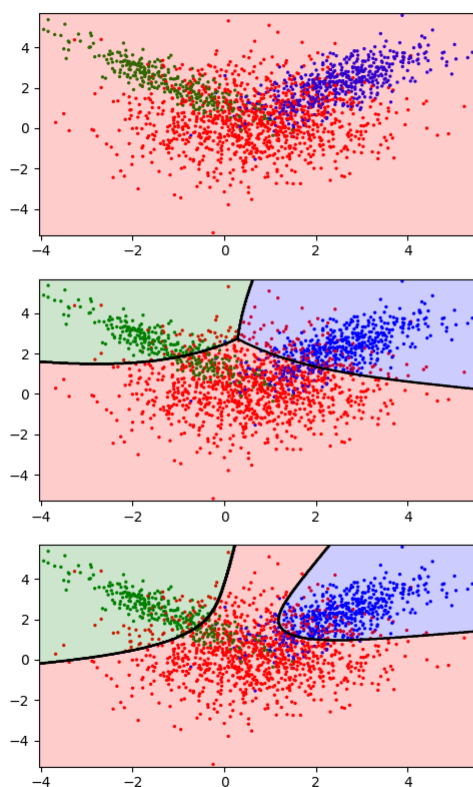
Question 3(d): Neural net with 9 hidden units.



Question 3(e)

Figure 11

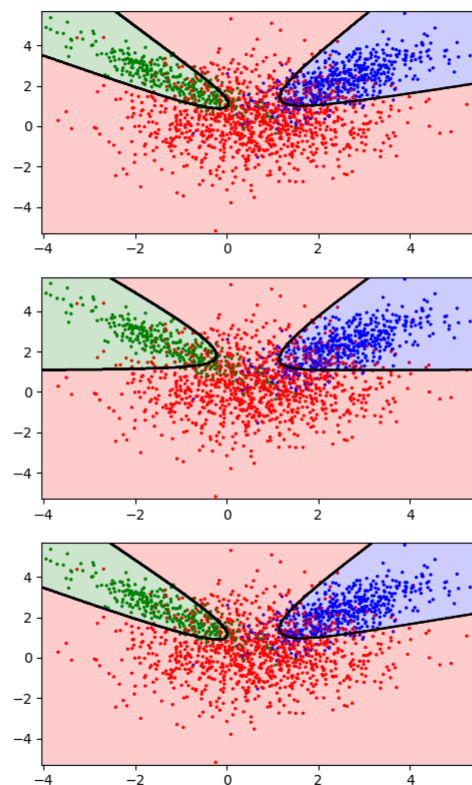
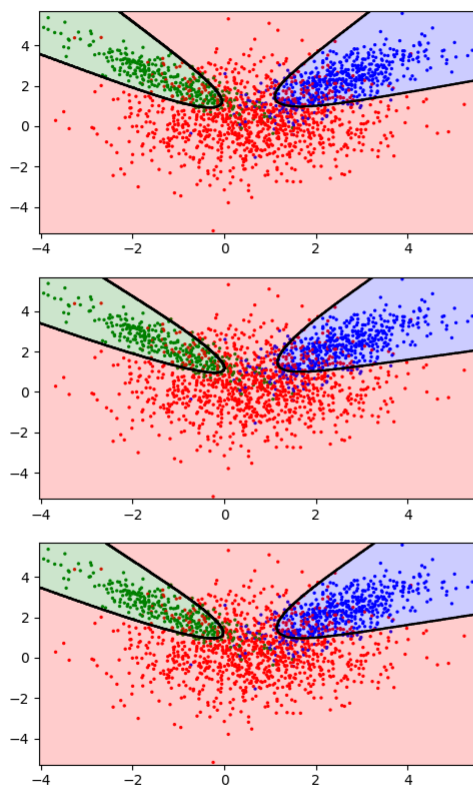
Question 3(e): different numbers of epochs.



Question 3(f)

Figure 12

Question 3(f): different initial weights



Question 4(a)

$$\begin{array}{ccccccc}
 & w_0 & & v_0 & & u_0 & \\
 & \searrow & & \searrow & & \searrow & \\
 x & \rightarrow & \widetilde{x} & \rightarrow & h & \rightarrow & \widetilde{h} & \rightarrow & g & \rightarrow & 0
 \end{array}$$