

Homework 3

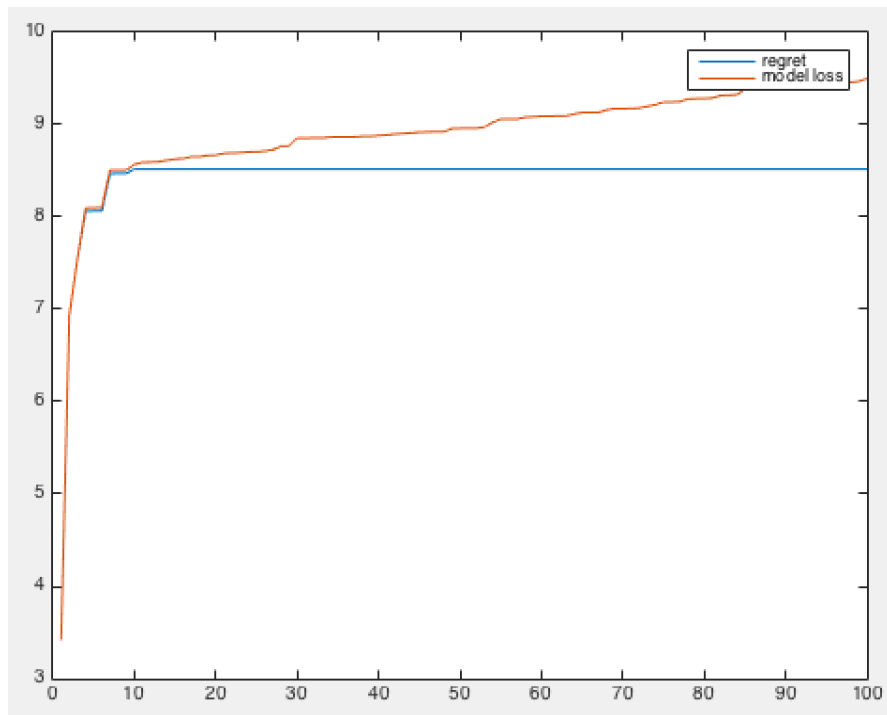
Xiangzhu Long

xiangzhl@andrew.cmu.edu

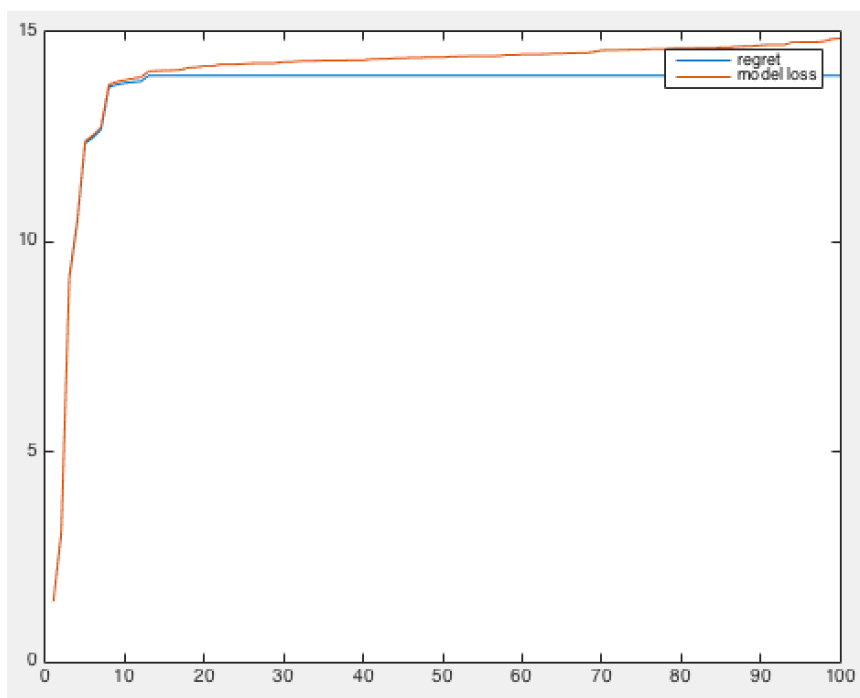
Question 1 (Hedge)

C.

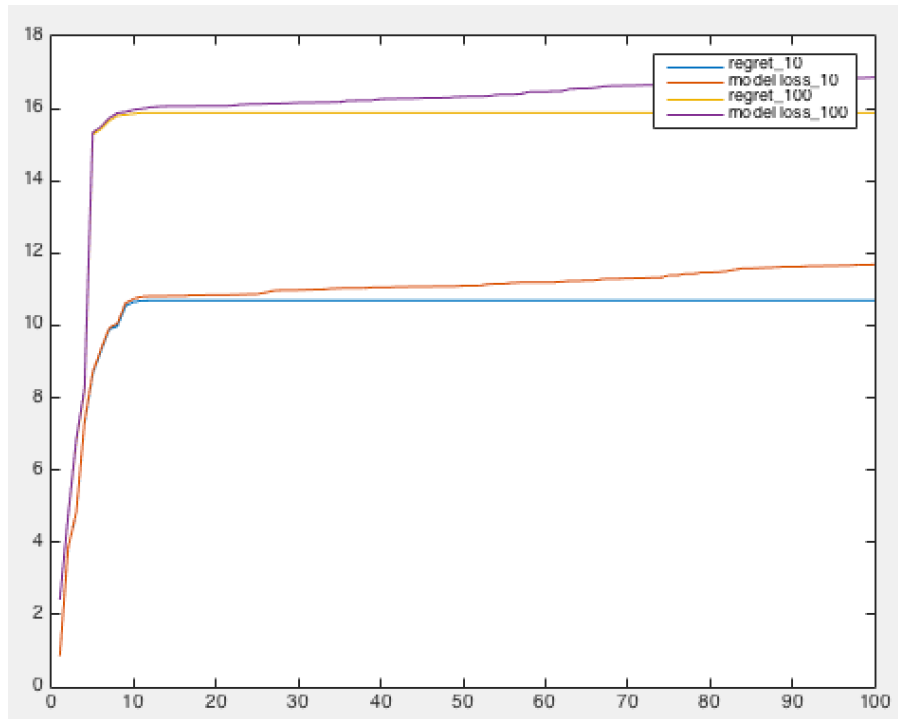
n=10:



n=100:

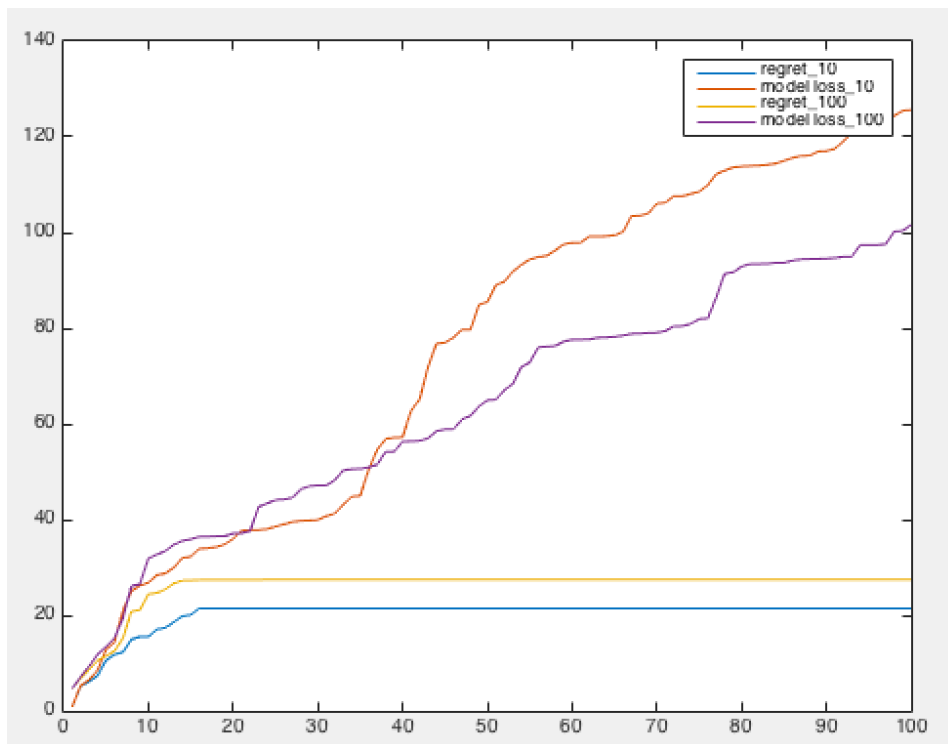


D:



The average regret curve and the loss curve change much, because with higher experts , it is harder to converge.

E.



It can say that the experts at dataset2 are comparatively bad.

G. 30 tests are needed.

Question 2 (Winnow)

B. 100, 390, 449, 821, 901.

Question 3

C. $\text{totalYeild_band} = 2.2006\text{e}+03$

$\text{totalYeild_rep} = 1.0527\text{e}+03$

$\text{radius} = 2.0904$

