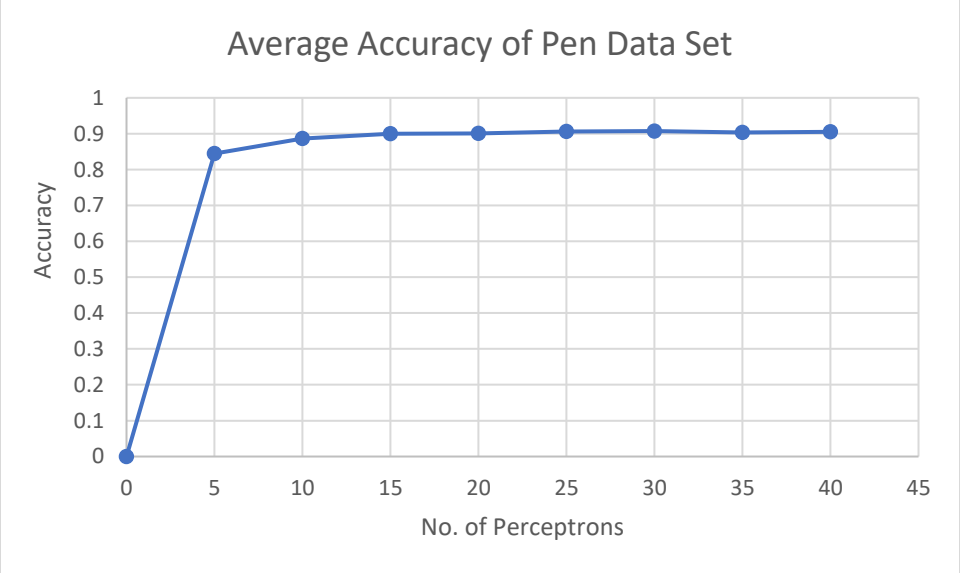
Question 5:

Data Set:	Max	Average	Standard Deviation
Pen	0.905660377358	0.904288164666	0.00141675376711
Car	0.837041884817	0.829581151832	0.00596376217272

Question 6:

Pen:

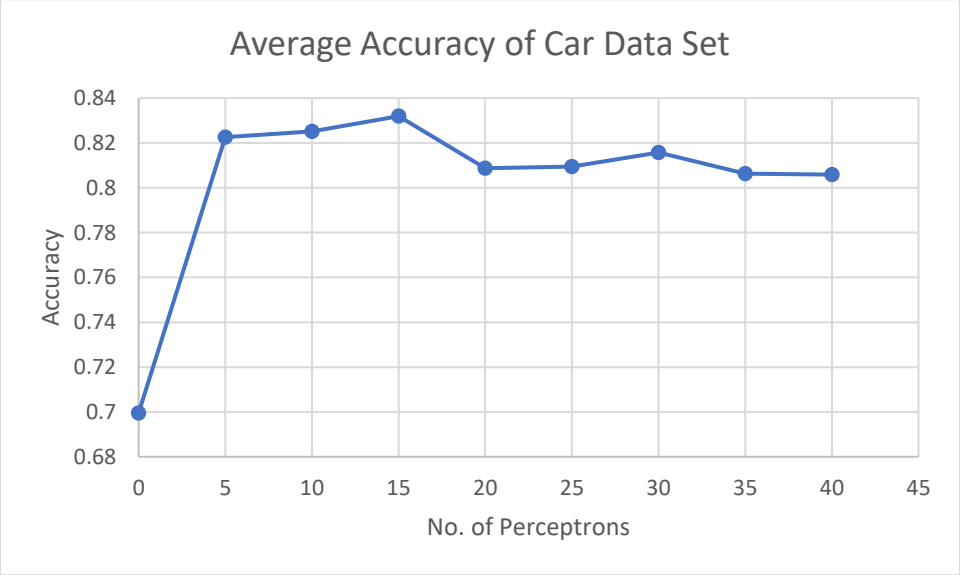
Data Set	No. of Perceptrons	Max	Average	Standard Deviation
Pen	0	0	0	0
Pen	5	0.851343625	0.844253859	0.006734588
Pen	10	0.891366495	0.886277873	0.004249492
Pen	15	0.905088622	0.899714122	0.006360119
Pen	20	0.903945111	0.900914808	0.005080585
Pen	25	0.908233276	0.905889079	0.001621206
Pen	30	0.912521441	0.907375643	0.002699993
Pen	35	0.9053745	0.903259005	0.002226178
Pen	40	0.907947399	0.905431675	0.00218018



For the pen data set there a sharp jump in accuracy in from 0 to 5 perceptrons followed by a gradual increase from 5 to 15 perceptrons. After 15 perceptrons accuracy levels off at the 90% accuracy mark and stays there.

Car:

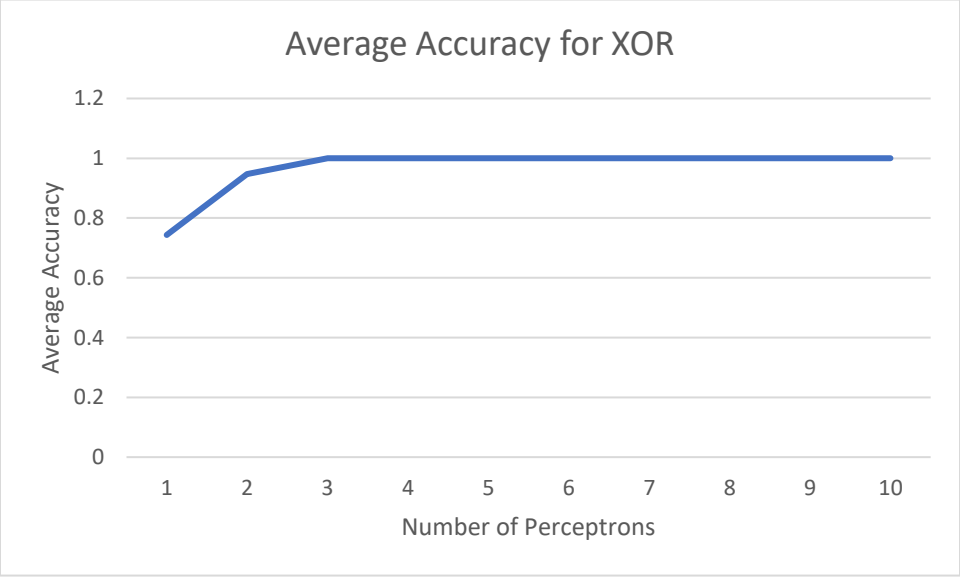
Data Set	No. of Perceptrons	Max	Average	Standard Deviation
Car	0	0.69960733	0.69960733	0
Car	5	0.840314136	0.822643979	0.013456872
Car	10	0.839659686	0.82513089	0.009295959
Car	15	0.85013089	0.831937173	0.009885449
Car	20	0.815445026	0.808769634	0.005274723
Car	25	0.829188482	0.809424084	0.01539503
Car	30	0.833769634	0.815706806	0.011921778
Car	35	0.827879581	0.806282723	0.015392804
Car	40	0.819371728	0.805890052	0.011885797



For the car data like with the pen data set we get a sharp jump in accuracy from 0 to 5 perceptrons but for car the accuracy starts at 70%. From 5 to 15 perceptrons we gradually rise where at 5 we hit our max average accuracy of about 83%. After 15 perceptrons we see our accuracy go down to about 81% at 20 perceptrons and then go back up to about 81.5% at 30 perceptrons after which we find stabilize at about 81% at 40 perceptrons.

Q7:

No. of Percepts	Max	Average	Std Deviation
1	0.779166667	0.743333333	0.023063921
2	1	0.946666667	0.106666667
3	1	1	0
4	1	1	0
5	1	1	0
6	1	1	0
7	1	1	0
8	1	1	0
9	1	1	0
10	1	1	0



The average accuracy goes from 79% to 100% in from 1 to 3 perceptrons activated. I found it weird it only took 3 perceptrons to go from 79% to 100% accuracy.