## Question 5:

1. testCar

Accuracies:

0.866492146597,

0.878926701571,

0.884162303665,

0.892670157068,

0.877617801047

Max: 0.892670157068

Average: 0.8799738219896 Standard Deviation: 0.00857

2. testPen

Accuracies:

0.902801600915,

0.893367638651,

0.904516866781,

0.910806174957,

0.905946255003

Max: 0.910806174957,

Average: 0.90349

Standard Deviation: 0.00572

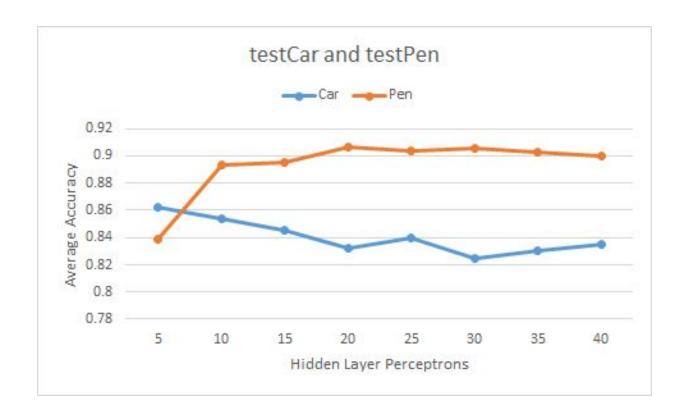
## Question 6:

## testCar

Perceptrons	Max	Average	Standard Deviation
0	0.693717277487	0.693717277487	0.0
5	0.897905759162	0.862172774869	0.0195355321537
10	0.861910994764	0.854188481675	0.00538720304378
15	0.859293193717	0.845418848168	0.0111863144603
20	0.847513089005	0.831806282723	0.0115821056574
25	0.864528795812	0.839397905759	0.0130929313483
30	0.844240837696	0.825130890052	0.0149776200653
35	0.852748691099	0.830235602094	0.0115272454745
40	0.840314136126	0.834816753927	0.00398301676825

## testPen

Perceptrons	Max	Average	Standard Deviation
0	0.0	0.0	0.0
5	0.85077186964	0.839165237278	0.00964488639632
10	0.911377930246	0.893710691824	0.0122339600217
15	0.906803887936	0.895311606632	0.0075752721076
20	0.909948542024	0.906918238994	0.00188419177282
25	0.908519153802	0.903830760435	0.00295216252565
30	0.907947398513	0.905831903945	0.00233371430897
35	0.906803887936	0.902973127501	0.0019439679817
40	0.904516866781	0.9	0.00505090058899



Increasing the number of perceptrons in the hidden layer causes the average accuracy of testPen to rise, while causing the opposite effect for the average accuracy of testCar.