2.1										
2.1.1										
training accuracy	90.23%									
testing accuracy	90.77%									
testing accuracy	30.1770									
Result:	We need both training and testing accuracy as the training accuracy shows how well the model has fitted the data and the testing accuracy shows how well the model can predict the correct label. If training accuracy is high and testing accuracy is low then this indicates overfitting. This will not give a very universal model.									
2.1.2										
learning rate	10	1	0.1	0.01	0.001					
training accuracy	9.87%	89.30%	91.79%	90.23%	85.86%					
testing accuracy	9.80%	88.89%	91.60%	90.77%	86.90%					
Result:	oscillate about decreased beyon	the minima. The	model accuracy oint. The accura	reduces when lea	e best at 0.1. At 1 irning rate is incre ning rate =0.1. Ove	ased or				
2.1.3	keeping learning	rate =0.1								
decay	1	0.1	0.01	0.001	0.0001	0.00001				
training accuracy	89.44%	91.30%	91.76%		91.79%	91.79%				
testing accuracy	89.72%	91.13%	91.61%	-	91.60%	91.60%				
Result:	The model accu	racy is reduced	when weight dec	cay is increased b	eyong 0.001.					
2.2										
2.2.1	for learning rate=0.01 and decay =0									
activation layer(first)	Logistic	RELU	LRELU	Softmax						
training accuracy	88.76%	92.31%	92.07%	58.14%						
testing accuracy	89.34%	92.40%	92.17%	58.67%						
Result:				r is RELU>LRELU the highest accur	>LOGISTIC>SOFT racy.	MAX. The				
2.2.2										
learning rate	10	1	0.1	0.01	0.001					
training accuracy	9.87%	20.63%	96.11%		86.44%					
testing accuracy	9.80%	20.78%	95.64%	 	86.82%					
Paguiti	the best learning rate is 0.1 with training and testing accuracy as 96.11% and 95.64%.									
Result:	the pest legitiff	y rate is U. I WILLI	training and tes	accuracy as	50.11 /0 allu 33.047	U.				
2.2.3										
	1									

decay	1	0.1	0.01	0.001	0.0001	0.00001				
training accuracy	92.45%	95.69%	96.20%	96.19%	96.25%	96.06%				
testing accuracy	92.72%	95.20%	95.63%	95.66%	95.86%	95.60%				
Result:	Add a small decay increases the accuracy slightly. Increasing decay beyond 0.0001 reduces the training and testing accuracy slightly. Decay reduces the chances of overfitting.									
2.2.4										
ReLU+ReLU+Softmax										
decay	0.0001	0.001	0.01	0.1	1					
training accuracy	98.70%	98.33%	98.22%	97.78%	94.19%					
testing accuracy	97.51%	97.12%	97.06%	97.25%	94.42%					
Result:	the decay rate 0.000 98.70% and 97.51%		it gives sligh	tly higher testing	g and training acc	uracy of				
3.1										
3.1.1										
learning rate	0.1	0.01	0.001	4						
training accuracy	21.55%	46.06%	40.57%							
testing accuracy	20.91%	44.38%	40.75%	as 0						
decay	0.00001	0.0001	0.001	0.01						
training accuracy	47.35%	46.01%	45.17%	44.83%	keeping					
testing accuracy	45.73%	44.46%	43.79%		learning rate as0.01					
Result:	Keeping the decay for learning rate as 0.00001. Increasing poor training and to and 45.73% for lear	0.01, I kept that a decay above 0.0 esting accuracy.	as constant a 0001 and inc The best train	and reduced the c creasing learning ning and testing	decay starting fro rate beyond 0.01	m 0.01 to resulted in				