Table 1: Performance Results for LogisticRegression\_100samples\_5features\_reg0.01 Problem

Optimizer	Mean Final Value	Std Dev	Best Value	Worst Value	Mean Func Evals	Success Rate (%)	Mean Time (s)
QQN-	3.15e-1	2.67e-12	3.15e-1	3.15e-1	98.5	0.0	0.036
Bisection-1							
QQN-Bisection-	3.15e-1	2.84e-12	3.15e-1	3.15e-1	98.5	0.0	0.032
2							
QQN-	3.15e-1	2.43e-12	3.15e-1	3.15e-1	74.3	0.0	0.031
StrongWolfe							
QQN-	3.15e-1	2.75e-12	3.15e-1	3.15e-1	91.5	0.0	0.036
CubicQuadraticIr	_						
QQN-	3.15e-1	2.54e-12	3.15e-1	3.15e-1	307.2	0.0	0.067
GoldenSection	0.45				400 -		0.004
L-BFGS-	3.15e-1	2.25e-5	3.15e-1	3.15e-1	106.7	0.0	0.034
MoreThuente	0.45	1.04.4	0.15 1	0.10.1	1550 5	0.0	0.700
L-BFGS-	3.15e-1	1.24e-4	3.15e-1	3.16e-1	1776.5	0.0	0.508
Aggressive	0.45	F 00 11	0.15 1	0.15 1		0.0	0.10
L-BFGS-	3.15e-1	5.83e-11	3.15e-1	3.15e-1	559.5	0.0	0.185
Conservative	0.15 1	1.05	0.15 1	0.15 1	90.49.5	0.0	0.000
L-BFGS-	3.15e-1	1.97e-5	3.15e-1	3.15e-1	3043.5	0.0	0.886
Limited	0.16.1	7 17 4	0.15 1	0.10 1	0.670 0	0.0	0.706
L-BFGS	3.16e-1	7.17e-4	3.15e-1	3.19e-1	2673.8	0.0	0.796
GD-	3.15e-1	4.41e-9	3.15e-1	3.15e-1	426.1	0.0	0.232
AdaptiveMoment		2.70. 7	9.15 1	0.15 1	1000 0	0.0	0.001
GD-Momentum	3.15e-1	3.78e-7	3.15e-1	3.15e-1	1668.0	0.0	0.901
GD-Nesterov	3.15e-1	3.66e-7	3.15e-1	3.15e-1	1668.0	0.0	0.902
Adam-Fast Adam-	3.16e-1	1.09e-4	3.16e-1	3.16e-1	90.8	0.0	0.033
	3.22e-1	1.09e-3	3.20e-1	3.24e-1	2502.0	0.0	0.890
WeightDecay GD-	3.27e-1	3.54e-4	3.26e-1	3.27e-1	1668.0	0.0	0.905
WeightDecay	3.276-1	3.34e-4	5.206-1	3.27E-1	1006.0	0.0	0.905
GD	3.77e-1	2.81e-3	3.72e-1	3.81e-1	1668.0	0.0	0.897
Adam-	4.05e-1	2.81e-3 9.76e-3	3.72e-1 3.87e-1	3.81e-1 4.23e-1	2502.0	0.0	0.891
AMSGrad	4.000-1	3.10E-3	9.016-1	4.200-1	4004.0	0.0	0.031
Adam	4.02e-1	9.33e-3	3.92e-1	4.21e-1	2502.0	0.0	0.889
Adam-Robust	4.32e-1	1.22e-2	4.13e-1	4.60e-1	2502.0	0.0	0.892
Trust Region-	4.24e-1	2.86e-3	4.20e-1	4.28e-1	86.6	0.0	0.025
Conservative	1.210 1	2.000 9	4.200 1	4.200 1	00.0	0.0	0.020
Trust Region-	6.95e-1	3.03e-2	6.37e-1	7.46e-1	5.0	0.0	0.002
Adaptive	0.000 1	5.050 2	0.010 1	1.100 1	5.0	0.0	0.002
Trust Region-	6.78e-1	2.08e-2	6.48e-1	7.23e-1	5.5	0.0	0.002
Precise	0.,00 1		0.100 1	50 1	J.0	J.0	3.30 <b>2</b>
Trust Region-	6.98e-1	2.53e-2	6.53e-1	7.51e-1	5.0	0.0	0.002
Aggressive	0.000 1	<b>_</b>	0.000 1			2.0	
Trust Region-	6.98e-1	3.18e-2	6.55e-1	7.75e-1	5.0	0.0	0.002
Standard	· <del>-</del>	- 7 -		–			
0			0.000 1				3.00 <b>2</b>