

Table 1: Performance Results for Barrier\10Dn\_mu0.1Problem

Optimizer	Mean Final Value	Std Dev	Best Value	Worst Value	Mean Func Evals	Success Rate (%)	Mean Time (s)
<b>GD</b>	2.00	$4.50 \times 10^{-11}$	2.00	2.00	304.9	0.0	0.008
L-BFGS-Conservative	2.00	$1.37 \times 10^{-8}$	2.00	2.00	379.6	0.0	0.010
GD-WeightDecay	2.00	$1.83 \times 10^{-5}$	2.00	2.00	49.3	0.0	0.002
Trust Region-Adaptive	2.12	$1.43 \times 10^{-1}$	2.00	2.43	103.5	0.0	0.001
Adam-WeightDecay	2.20	$7.11 \times 10^{-2}$	2.08	2.38	502.0	0.0	0.012
Trust Region-Standard	2.36	$4.42 \times 10^{-1}$	2.00	3.31	31.4	0.0	0.000
GD-Nesterov	2.50	$5.28 \times 10^{-2}$	2.43	2.64	21.0	0.0	0.001
Adam-Fast	2.60	$8.53 \times 10^{-2}$	2.39	2.79	31.7	0.0	0.001
GD-Momentum	3.37	$1.95 \times 10^{-1}$	2.94	3.69	21.2	0.0	0.001
Adam	6.04	$4.52 \times 10^{-1}$	5.36	7.06	502.0	0.0	0.011
Adam-AMSGrad	6.13	$3.97 \times 10^{-1}$	5.48	6.95	502.0	0.0	0.013
Trust Region-Conservative	7.92	$7.30 \times 10^{-1}$	6.57	9.16	602.0	0.0	0.004