

Zhunan Shuai

Question 1

Part1

<b>n_estimators</b>	<b>criterion</b>	<b>scores</b>	<b>mean_score</b>
10	gini	[0.9649, 0.9649, 0.9123, 0.9561, 0.9912]	0.95708
10	entropy	[0.9474, 0.9649, 0.9474, 0.9649, 0.9735]	0.95962
25	gini	[0.9561, 0.9561, 0.9298, 0.9649, 0.9912]	0.95962
25	entropy	[0.9561, 0.9649, 0.9474, 0.9561, 0.9823]	0.96136
50	gini	[0.9649, 0.9474, 0.9386, 0.9649, 0.9823]	0.95962
50	entropy	[0.9649, 0.9474, 0.9386, 0.9649, 0.9912]	0.96156

Part2

Random Forest Results Table

<b>param_n_estimators</b>	<b>mean_test_score</b>	<b>std_test_score</b>
5	0.943813	0.023215
10	0.945583	0.020252
15	0.945583	0.020998
20	0.949107	0.023770

### Histogram Gradient Boosting Results Table

param_max_iter	mean_test_score	std_test_score
25	0.961388	0.018871
50	0.964912	0.025423
75	0.970160	0.019676
100	0.973684	0.021487

Part3



