

	charges	predicted_Y	-Y
0	9724.53	11222.24	-1497.71
1	8547.691	9759.394	-1211.7
2	45702.02	37577.1	8124.919
3	12950.07	15888.41	-2938.34
4	9644.253	6763.878	2880.374
5	4500.339	4015.998	484.3408
6	2198.19	1563.009	635.1806
7	11436.74	14387.48	-2950.74
8	7537.164	9008.315	-1471.15
9	5425.023	7387.377	-1962.35
10	6753.038	4982.859	1770.179
11	10493.95	10267.6	226.3443
12	7337.748	8877.456	-1539.71
13	4185.098	3932.458	252.6399
14	18310.74	27104.1	-8793.36
15	10702.64	11246.13	-543.49
16	12523.6	11052.14	1471.461
17	3490.549	6112.797	-2622.25
18	6457.843	8062.224	-1604.38
19	33475.82	26661.83	6813.988
20	23967.38	33220.76	-9253.37
21	12643.38	14296.62	-1653.24
22	23045.57	11858.57	11187
23	23065.42	31949.59	-8884.17
24	1674.632	4076.209	-2401.58
25	4667.608	9244.946	-4577.34
26	3732.625	1216.49	2516.135
27	7682.67	10230.26	-2547.59
28	3756.622	3879.683	-123.062
29	8413.463	10278.32	-1864.85
30	8059.679	9031.791	-972.112
31	48970.25	39858.72	9111.527
32	12979.36	15606.04	-2626.68
33	20630.28	13759.44	6870.848
34	14571.89	24474.52	-9902.63
35	4137.523	5198.556	-1061.03
36	8347.164	12831.38	-4484.22
37	51194.56	30264.13	20930.42
38	40003.33	33053.16	6950.169
39	1880.487	3472.257	-1591.77
40	5458.046	4124.703	1333.343
41	2867.12	3992.347	-1125.23
42	20149.32	30193.98	-10044.7
43	47496.49	38993.39	8503.101
44	36149.48	27370.64	8778.844
45	26018.95	4855.261	21163.69

46	19749.38	11138.7	8610.679
47	6940.91	7588.504	-647.594
48	4718.204	3801.785	916.4182
49	22192.44	10596.22	11596.22
50	2899.489	5642.141	-2742.65
51	18838.7	3342.235	15496.47
52	23568.27	32712.58	-9144.3
53	46255.11	38507.57	7747.546
54	24227.34	16140.74	8086.599
55	3268.847	7038.22	-3769.37
56	2322.622	5649.952	-3327.33
57	8827.21	9141.03	-313.82
58	14478.33	9590.621	4887.709
59	13112.6	11603.74	1508.863
60	1253.936	1630.386	-376.45
61	46718.16	38602.3	8115.868
62	13919.82	15363.83	-1444.01
63	9630.397	11939.17	-2308.78
64	10736.87	14489.46	-3752.59
65	9880.068	14075.86	-4195.79
66	32548.34	25395.98	7152.357
67	38746.36	31712.93	7033.42
68	3180.51	1138.046	2042.464
69	8162.716	10209.47	-2046.75
70	13041.92	12437.13	604.7899
71	11554.22	11800.14	-245.913
72	16232.85	24676.91	-8444.06
73	13887.97	15789.24	-1901.28
74	13012.21	11044.59	1967.615
75	13217.09	12849.34	367.7535
76	7147.105	6543.959	603.1457
77	7731.427	9878.029	-2146.6
78	20296.86	30034.17	-9737.31
79	47403.88	38783.52	8620.359
80	11658.38	12214.79	-556.407
81	45863.21	36893.2	8970.006
82	2055.325	3740.427	-1685.1
83	7441.053	9408.189	-1967.14
84	41034.22	34565.56	6468.66
85	18972.5	28774.99	-9802.5
86	3410.324	8541.185	-5130.86
87	2699.568	4436.835	-1737.27
88	12333.83	12157.32	176.5067
89	36837.47	29872.74	6964.727
90	6334.344	10371.52	-4037.17
91	10214.64	11350.43	-1135.79
92	17878.9	8263.441	9615.459

93	8515.759	9291.358	-775.599
94	4518.826	8345.706	-3826.88
95	5148.553	7443.659	-2295.11
96	42303.69	35732.07	6571.623
97	38998.55	32943.77	6054.778
98	5327.4	7477.684	-2150.28
99	10602.39	14995.21	-4392.83
100	1824.285	3941.453	-2117.17
101	5377.458	8476.797	-3099.34
102	4349.462	6568.864	-2219.4
103	37742.58	31162.29	6580.282
104	32787.46	32584.29	203.172
105	3353.47	1657.639	1695.832
106	10577.09	9070.348	1506.739
107	3556.922	6246.496	-2689.57
108	11944.59	14627.15	-2682.56
109	52590.83	36833.38	15757.45
110	12475.35	10309.47	2165.877
111	4266.166	10654.52	-6388.35
112	9249.495	10063.65	-814.151
113	33732.69	26483.72	7248.966
114	48675.52	39662.71	9012.81
115	7729.646	8738.716	-1009.07
116	1964.78	260.0023	1704.778
117	8444.474	8980.388	-535.914
118	12347.17	15282.52	-2935.35
119	9301.894	9542.739	-240.846
120	42124.52	35132.47	6992.046
121	9991.038	7115.807	2875.23
122	14319.03	16958.31	-2639.28
123	5428.728	9860.769	-4432.04
124	7626.993	8355.305	-728.312
125	4906.41	2877.089	2029.32
126	23401.31	32811.23	-9409.92
127	21098.55	31047.33	-9948.77
128	48173.36	39144.72	9028.637
129	1917.318	5027.601	-3110.28
130	8219.204	9676.781	-1457.58
131	1725.552	3591.208	-1865.66
132	5976.831	7856.762	-1879.93
133	9361.327	8761.735	599.5921
134	22144.03	31257.16	-9113.13
135	35491.64	29444.4	6047.24
136	19515.54	29530.14	-10014.6
137	10107.22	9190.531	916.6893
138	23244.79	32444.66	-9199.87
139	2789.057	3004.851	-215.793

140	2261.569	3245.504	-983.935
141	10594.5	10838.82	-244.321
142	9304.702	13393.97	-4089.27
143	10435.07	12910.17	-2475.11
144	4894.753	5175.115	-280.361
145	14313.85	15761.92	-1448.07
146	28287.9	15196.81	13091.08
147	14426.07	2280.912	12145.16
148	1627.282	-408.009	2035.291
149	25517.11	11080.43	14436.68
150	6555.07	7606.866	-1051.8
151	39611.76	31336.62	8275.139
152	9964.06	12529.69	-2565.63
153	1720.354	2373.681	-653.327
154	2730.108	6042.997	-3312.89
155	6500.236	8088.584	-1588.35
156	2643.269	4044.613	-1401.34
157	1719.436	2158.823	-439.387
158	11085.59	11437.73	-352.142
159	10115.01	12546.8	-2431.79
160	4846.92	7506.069	-2659.15
161	12982.87	16447.54	-3464.66
162	28923.14	11632.2	17290.94
163	9391.346	14055.74	-4664.39
164	4544.235	3304.59	1239.645
165	17128.43	7620.409	9508.017
166	13844.51	22679.95	-8835.45
167	6113.231	7947.514	-1834.28
168	4441.213	5583.883	-1142.67
169	1633.962	5094.368	-3460.41
170	4058.712	6479.563	-2420.85
171	4435.094	5388.958	-953.864
172	8310.839	9907.098	-1596.26
173	1986.933	5274.891	-3287.96
174	4260.744	5879.244	-1618.5
175	4504.662	7024.24	-2519.58
176	4428.888	3935.414	493.4742
177	6117.495	5357.51	759.9847
178	30184.94	38145.12	-7960.19
179	1708.926	1415.927	292.9984
180	11187.66	12579.64	-1391.98
181	6796.863	8880.422	-2083.56
182	11356.66	13429.2	-2072.54
183	2498.414	5336.148	-2837.73
184	27375.9	5459.385	21916.52
185	28101.33	36247.2	-8145.87
186	2254.797	4277.189	-2022.39

187	2597.779	2036.765	561.0136
188	14692.67	14988.28	-295.613
189	10370.91	12988.41	-2617.49
190	41097.16	34807.44	6289.724
191	3981.977	5047.896	-1065.92
192	5472.449	5761.24	-288.791
193	21223.68	31013.42	-9789.74
194	2534.394	5662.156	-3127.76
195	1972.95	1982.063	-9.11258
196	6406.411	8649.1	-2242.69
197	6551.75	10352.33	-3800.58
198	4058.116	8139.36	-4081.24
199	4243.59	5480.092	-1236.5
200	11512.41	13392.36	-1879.96
201	46889.26	38239.44	8649.824
202	12268.63	13697.28	-1428.65
203	19199.94	28726.59	-9526.65
204	4433.388	6533.965	-2100.58
205	42969.85	35365.96	7603.893
206	23241.47	3962.053	19279.42
207	9140.951	11958.13	-2817.18
208	5836.52	9313.962	-3477.44
209	1149.396	6047.617	-4898.22
210	8765.249	11091.77	-2326.52
211	14043.48	14728.41	-684.929
212	5312.17	5148.832	163.3375
213	10795.94	4282.26	6513.677
214	6282.235	7915.831	-1633.6
215	1969.614	1200.762	768.852
216	6746.743	8199.313	-1452.57
217	5354.075	4641.087	712.9873
218	14001.29	13471.05	530.2354
219	6877.98	4652.033	2225.947
220	6196.448	10285.19	-4088.75
221	7986.475	7670.299	316.1762
222	8277.523	9296.064	-1018.54
223	3206.491	2449.263	757.2287
224	11848.14	13254.84	-1406.7
225	14210.54	16511.23	-2300.69
226	12265.51	15293.25	-3027.74
227	11837.16	10683.06	1154.104
228	6652.529	5759.292	893.2365
229	2137.654	2239.556	-101.903
230	1131.507	1857.893	-726.386
231	8342.909	13553.42	-5210.52
232	12244.53	14215.5	-1970.97
233	4561.189	5408.504	-847.316

234	17626.24	4010.048	13616.19
235	6875.961	9574.271	-2698.31
236	9447.382	10229.29	-781.907
237	34254.05	27822.13	6431.919
238	6067.127	7769.049	-1701.92
239	11729.68	10901.43	828.25
240	5383.536	6281.363	-897.827
241	37465.34	29264.33	8201.011
242	7371.772	11254.66	-3882.88
243	7325.048	7639.708	-314.659
244	8410.047	10187.91	-1777.86
245	10461.98	12016.4	-1554.42
246	3279.869	3172.866	107.0024
247	7727.253	10623.49	-2896.23
248	2731.912	1579.034	1152.878
249	6858.48	7216.659	-358.18
250	19521.97	28274.69	-8752.73
251	47305.31	38603.93	8701.38
252	3987.926	6423.339	-2435.41
253	3238.436	8212.015	-4973.58
254	7323.735	2490.804	4832.931
255	1704.568	395.3534	1309.215
256	7445.918	10547.59	-3101.67
257	1629.834	4127.508	-2497.67
258	4877.981	4961.458	-83.477
259	3561.889	2571.061	990.8274
260	8605.362	7322.673	1282.689
261	24520.26	33185.89	-8665.62
262	45710.21	37979.09	7731.12
263	15019.76	14769.09	250.6704
264	6664.686	8009.736	-1345.05
265	20709.02	16130.81	4578.209
266	40932.43	32851.42	8081.008
267	9500.573	9893.942	-393.369
268	40182.25	33502.53	6679.717
269	1137.47	3254.468	-2117
270	38511.63	30576.07	7935.557
271	4670.64	8218.55	-3547.91
272	13019.16	14459.89	-1440.73
273	4189.113	3974.418	214.6953
274	38709.18	31964.56	6744.617
275	5594.846	8518.636	-2923.79
276	27346.04	11322.04	16024
277	9788.866	9715.015	73.85132
278	2362.229	3866.505	-1504.28
279	13224.69	12892.35	332.3428
280	12222.9	11546.87	676.03

281	4320.411	8056.356	-3735.95
282	12731	13444.49	-713.495
283	2203.472	2800.069	-596.597
284	6079.672	10707.06	-4627.39
285	3591.48	5623.946	-2032.47
286	8596.828	11504.02	-2907.19
287	21771.34	31496.29	-9724.95
288	2927.065	9818.32	-6891.26
289	1708.001	1199.442	508.5594
290	2803.698	324.0693	2479.629
291	48517.56	39779.38	8738.18
292	9282.481	9908.386	-625.906
293	4738.268	6895.16	-2156.89
294	12269.69	13944.69	-1675
295	11879.1	13682.44	-1803.34
296	34166.27	26874.31	7291.965
297	6496.886	7286.152	-789.266
298	4751.07	6914.354	-2163.28
299	8457.818	12105.59	-3647.77
300	1639.563	2468.154	-828.591
301	2566.471	3801.674	-1235.2
302	14455.64	25013.59	-10557.9
303	16577.78	25763.93	-9186.15
304	13457.96	13274.09	183.8713
305	2721.321	3260.902	-539.581
306	18218.16	4989.15	13229.01
307	8615.3	9632.421	-1017.12
308	9722.77	12546.5	-2823.73
309	14283.46	23290.74	-9007.28
310	21472.48	30482.53	-9010.06
311	5972.378	10319.03	-4346.65
312	14711.74	23395.99	-8684.24
313	2128.431	2522.457	-394.026
314	5438.749	11319.2	-5880.45
315	3935.18	7329.244	-3394.06
316	8534.672	8428.894	105.7773
317	11884.05	239.5581	11644.49
318	6837.369	7863.743	-1026.37
319	42983.46	34996.79	7986.671
320	3925.758	6393.408	-2467.65
321	18903.49	6426.249	12477.24
322	2117.339	-75.3678	2192.707
323	8283.681	10756.09	-2472.41
324	3366.67	6548.439	-3181.77
325	11833.78	9909.866	1923.916
326	47928.03	38832.34	9095.686
327	17361.77	27191.01	-9829.24

328	9290.14	11702.12	-2411.98
329	42560.43	35261.25	7299.176
330	13224.06	15370.87	-2146.81
331	4433.916	6657.671	-2223.75
332	9377.905	10925.62	-1547.72
333	3597.596	7056.33	-3458.73
334	29141.36	36185.98	-7044.62
335	4562.842	5943.767	-1380.93
336	13616.36	11314.75	2301.604
337	1837.237	847.2616	989.9754
338	26125.67	23842.45	2283.222
339	3176.288	1645.901	1530.387
340	25382.3	34426.6	-9044.3
341	5662.225	11181.08	-5518.86
342	2352.968	1506.27	846.6989
343	40904.2	32003.77	8900.431
344	5325.651	6937.247	-1611.6
345	4883.866	5307.305	-423.439
346	30942.19	37912.86	-6970.67
347	1256.299	2183.807	-927.508
348	8606.217	9951.508	-1345.29
349	22493.66	2488.923	20004.74
350	11552.9	13289.83	-1736.92
351	3378.91	1183.937	2194.973
352	5124.189	11010.73	-5886.54
353	4837.582	7088.008	-2250.43
354	43254.42	36327.12	6927.295
355	8269.044	7310.259	958.7854
356	43943.88	30111.65	13832.22
357	37165.16	29124.27	8040.889
358	5484.467	6983.721	-1499.25
359	9222.403	11278.64	-2056.24
360	1635.734	1571.286	64.44737
361	2974.126	2291.319	682.8066
362	24059.68	3656.579	20403.1
363	28468.92	12514.39	15954.53
364	44260.75	36858.56	7402.185
365	10959.33	9850.365	1108.965
366	1737.376	413.4469	1323.929
367	12323.94	11577.17	746.7681
368	2404.734	4741.713	-2336.98
369	7345.084	9885.891	-2540.81
370	4040.558	5745.966	-1705.41
371	1837.282	6985.27	-5147.99
372	2902.907	4160.402	-1257.5
373	36219.41	27783.36	8436.046
374	6640.545	4671.322	1969.223

375	1607.51	-1100.7	2708.205
376	39871.7	32832.47	7039.233
377	10807.49	12821.65	-2014.16
378	42856.84	35800.83	7056.004
379	11345.52	9979.298	1366.221
380	4462.722	7440.199	-2977.48
381	21595.38	-361.057	21956.44
382	2257.475	2286.783	-29.3075
383	10118.42	11796.52	-1678.1
384	4746.344	5807.512	-1061.17
385	2205.981	3387.672	-1181.69
386	10797.34	12379.24	-1581.91
387	7151.092	8066.373	-915.281
388	5969.723	7004.853	-1035.13
389	4564.191	5729.05	-1164.86
390	2690.114	2785.893	-95.7797
391	39241.44	31789.79	7451.651
392	1909.527	3202.939	-1293.41
393	8932.084	8740.075	192.0086
394	1631.668	4557.223	-2925.56
395	7650.774	13220.58	-5569.81
396	10601.41	14767.33	-4165.92
397	3277.161	7248.883	-3971.72
398	17942.11	26621.58	-8679.48
399	10226.28	14096.34	-3870.06
400	14418.28	17266.77	-2848.48
401	13451.12	11654.55	1796.575
402	2200.831	2181.539	19.29196
403	5649.715	8233.331	-2583.62
404	12592.53	18919.45	-6326.92
405	7419.478	7671.361	-251.883
406	5261.469	6178.872	-917.402
407	1744.465	2073.711	-329.246
408	36898.73	26415.04	10483.69
409	13143.86	15095.34	-1951.47
410	6781.354	10388.88	-3607.53
411	12981.35	16089.44	-3108.09
412	8556.907	11899.86	-3342.95
413	12479.71	11330.05	1149.661
414	48824.45	39291.21	9533.24
415	3443.064	6048.434	-2605.37
416	7935.291	12456.79	-4521.5
417	16586.5	2921.819	13664.68
418	14590.63	15822.24	-1231.6
419	1532.47	4390.013	-2857.54
420	6933.242	4962.025	1971.217
421	2217.469	6078.276	-3860.81

422	11856.41	15209.69	-3353.28
423	19214.71	8751.266	10463.44
424	11534.87	8986.794	2548.078
425	40974.16	33927.6	7046.561
426	4889.037	6536.197	-1647.16
427	33907.55	26512.11	7395.437
428	16776.3	27446.17	-10669.9
429	10982.5	15295.03	-4312.52
430	8026.667	8622.631	-595.964
431	44501.4	33994.38	10507.02
432	8280.623	10039.9	-1759.28
433	3736.465	3660.409	76.05561
434	9058.73	15464.96	-6406.23
435	18767.74	29424.29	-10656.6
436	36197.7	29320.6	6877.096
437	19107.78	27872.31	-8764.53
438	25656.58	10195.99	15460.58
439	39125.33	33076.8	6048.529
440	3906.127	4221.548	-315.421
441	17085.27	25181.86	-8096.59
442	3021.809	5376.267	-2354.46
443	36397.58	28015.19	8382.383
444	4449.462	7035.233	-2585.77
445	11396.9	15404.96	-4008.06