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1 C:\Users\chris\anaconda3\envs\CreatePokeAI\python.exe
  C:/Users/chris/IdeaProjects/PokemonGame2/PokemonGame
  /src/CreateNewPokeAI/Models/ModelTesting/
  RegressionStatDistributionTests.py
2 81
3 (81, 62501)
4 (81,)
5 Data Loaded at 0.7598439000000001 seconds
6 Creating Models
7 Pipeline Made at 0.000565099999999763 seconds
8
9 Linear_Regression
10 Creating Data for Linear_Regression_RUN_1
11 Model Made at 0.1534268999999992 seconds
12 Finding Best Fits and Testing Model
13 Created Estimates at 0.001519099999998844 seconds
14 R Squared SCORE:
15 0.1454173024445195
16 Run Completed at 0.1553089999999992 seconds.
17
18 Creating Data for Linear_Regression_RUN_2
19 Model Made at 0.1954340000000001 seconds
20 Finding Best Fits and Testing Model
21 Created Estimates at 0.001297999999997993 seconds
22 R Squared SCORE:
23 -1.0534525331204017
24 Run Completed at 0.1971343999999993 seconds.
25
26 Creating Data for Linear_Regression_RUN_3
27 Model Made at 0.15507219999999977 seconds
28 Finding Best Fits and Testing Model
29 Created Estimates at 0.002204700000000594 seconds
30 R Squared SCORE:
31 -0.05621094717163122
32 Run Completed at 0.1577655 seconds.
33
34 Creating Data for Linear_Regression_RUN_4
35 Model Made at 0.18013909999999989 seconds
36 Finding Best Fits and Testing Model
37 Created Estimates at 0.00131579999999978 seconds
38 R Squared SCORE:
```

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39 -1.3557101652673875
40 Run Completed at 0.1819367999999999 seconds.
41
42 Creating Data for Linear_Regression_RUN_5
43 Model Made at 0.1551601000000025 seconds
44 Finding Best Fits and Testing Model
45 Created Estimates at 0.001917499999997944 seconds
46 R Squared SCORE:
47 -0.6449175046753444
48 Run Completed at 0.15755720000000029 seconds.
49
50 Creating Data for Linear_Regression_RUN_6
51 Model Made at 0.18776190000000037 seconds
52 Finding Best Fits and Testing Model
53 Created Estimates at 0.001261199999996293 seconds
54 R Squared SCORE:
55 -1.287648280149424
56 Run Completed at 0.1894326000000004 seconds.
57
58 Creating Data for Linear_Regression_RUN_7
59 Model Made at 0.15667570000000008 seconds
60 Finding Best Fits and Testing Model
61 Created Estimates at 0.001376999999997395 seconds
62 R Squared SCORE:
63 0.6567407268267509
64 Run Completed at 0.1584829000000001 seconds.
65
66 Creating Data for Linear_Regression_RUN_8
67 Model Made at 0.2060696999999958 seconds
68 Finding Best Fits and Testing Model
69 Created Estimates at 0.001094000000001504 seconds
70 R Squared SCORE:
71 0.8370002016819568
72 Run Completed at 0.2075461999999999 seconds.
73
74 Creating Data for Linear_Regression_RUN_9
75 Model Made at 0.18234740000000027 seconds
76 Finding Best Fits and Testing Model
77 Created Estimates at 0.001410299999998644 seconds
78 R Squared SCORE:
79 -0.1275335976954659
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80 Run Completed at 0.1842597999999997 seconds.
81
82 Creating Data for Linear_Regression_RUN_10
83 Model Made at 0.1862358000000004 seconds
84 Finding Best Fits and Testing Model
85 Created Estimates at 0.0011554000000000286 seconds
86 R Squared SCORE:
87 0.3639466520336061
88 Run Completed at 0.18788819999999973 seconds.
89
90 Linear_Regression all runs completed at 1.
    778132399999996 seconds.
91 Lasso_Regression
92 Creating Data for Lasso_Regression_RUN_1
93 Model Made at 2.2090664 seconds
94 Finding Best Fits and Testing Model
95 Created Estimates at 0.0015806000000004872 seconds
96 R Squared SCORE:
97 -0.8877030705678579
98 Run Completed at 2.2111735 seconds.
99
100 Creating Data for Lasso_Regression_RUN_2
101 Model Made at 1.538957400000001 seconds
102 Finding Best Fits and Testing Model
103 Created Estimates at 0.001105499999995374 seconds
104 R Squared SCORE:
105 -1.7672291731662009
106 Run Completed at 1.540407399999994 seconds.
107
108 Creating Data for Lasso_Regression_RUN_3
109 Model Made at 1.642389299999996 seconds
110 Finding Best Fits and Testing Model
111 Created Estimates at 0.001333800000011618 seconds
112 R Squared SCORE:
113 -0.7768114340717256
114 Run Completed at 1.644303100000001 seconds.
115
116 Creating Data for Lasso_Regression_RUN_4
117 Model Made at 2.3869913 seconds
118 Finding Best Fits and Testing Model
119 Created Estimates at 0.001165700000013795 seconds
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120 R Squared SCORE:  
121 -0.015374905207642398  
122 Run Completed at 2.3885311 seconds.  
123  
124 Creating Data for Lasso_Regression_RUN_5  
125 Model Made at 3.4410258000000002 seconds  
126 Finding Best Fits and Testing Model  
127 Created Estimates at 0.001267000000003512 seconds  
128 R Squared SCORE:  
129 -2.0975417339659135  
130 Run Completed at 3.442590599999999 seconds.  
131  
132 Creating Data for Lasso_Regression_RUN_6  
133 Model Made at 2.9677588000000004 seconds  
134 Finding Best Fits and Testing Model  
135 Created Estimates at 0.001311399999987414 seconds  
136 R Squared SCORE:  
137 -1.0248453145704626  
138 Run Completed at 2.969452900000002 seconds.  
139  
140 Creating Data for Lasso_Regression_RUN_7  
141 Model Made at 1.4627896000000007 seconds  
142 Finding Best Fits and Testing Model  
143 Created Estimates at 0.000933599999997568 seconds  
144 R Squared SCORE:  
145 0.5158700431521505  
146 Run Completed at 1.4640190000000004 seconds.  
147  
148 Creating Data for Lasso_Regression_RUN_8  
149 Model Made at 3.3896595000000005 seconds  
150 Finding Best Fits and Testing Model  
151 Created Estimates at 0.001136999999999436 seconds  
152 R Squared SCORE:  
153 0.15822689646694554  
154 Run Completed at 3.3911544000000013 seconds.  
155  
156 Creating Data for Lasso_Regression_RUN_9  
157 Model Made at 1.3458444000000007 seconds  
158 Finding Best Fits and Testing Model  
159 Created Estimates at 0.001277500000004866 seconds  
160 R Squared SCORE:
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161 0.5963832123286446
162 Run Completed at 1.3474757000000004 seconds.
163
164 Creating Data for Lasso_Regression_RUN_10
165 Model Made at 2.5699787 seconds
166 Finding Best Fits and Testing Model
167 Created Estimates at 0.0014973000000004788 seconds
168 R Squared SCORE:
169 0.026770321367914907
170 Run Completed at 2.5719370999999995 seconds.
171
172 Lasso_Regression all runs completed at 22.9717714
seconds.
173 SVM_RBF
174 Creating Data for SVM_RBF_RUN_1
175 Model Made at 0.2831431000000002 seconds
176 Finding Best Fits and Testing Model
177 Created Estimates at 0.053348599999999635 seconds
178 R Squared SCORE:
179 -2.4424520090341986
180 Run Completed at 0.33704159999999916 seconds.
181
182 Creating Data for SVM_RBF_RUN_2
183 Model Made at 0.2516449999999999 seconds
184 Finding Best Fits and Testing Model
185 Created Estimates at 0.04317299999999946 seconds
186 R Squared SCORE:
187 -0.06437206497538361
188 Run Completed at 0.2953513000000001 seconds.
189
190 Creating Data for SVM_RBF_RUN_3
191 Model Made at 0.2932793999999994 seconds
192 Finding Best Fits and Testing Model
193 Created Estimates at 0.05073859999999897 seconds
194 R Squared SCORE:
195 -1.4953076570413146
196 Run Completed at 0.3445020999999997 seconds.
197
198 Creating Data for SVM_RBF_RUN_4
199 Model Made at 0.22496160000000032 seconds
200 Finding Best Fits and Testing Model
```

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201 Created Estimates at 0.0589410000000008 seconds
202 R Squared SCORE:
203 0.023596414297642365
204 Run Completed at 0.2843878000000011 seconds.
205
206 Creating Data for SVM_RBF_RUN_5
207 Model Made at 0.2465641000000005 seconds
208 Finding Best Fits and Testing Model
209 Created Estimates at 0.05407109999999804 seconds
210 R Squared SCORE:
211 0.03276904031578354
212 Run Completed at 0.301141399999988 seconds.
213
214 Creating Data for SVM_RBF_RUN_6
215 Model Made at 0.24339820000000145 seconds
216 Finding Best Fits and Testing Model
217 Created Estimates at 0.06532179999999954 seconds
218 R Squared SCORE:
219 -1.2365623438055322
220 Run Completed at 0.309115399999996 seconds.
221
222 Creating Data for SVM_RBF_RUN_7
223 Model Made at 0.23826550000000069 seconds
224 Finding Best Fits and Testing Model
225 Created Estimates at 0.0393225999999843 seconds
226 R Squared SCORE:
227 -0.13520202384992275
228 Run Completed at 0.2781012000000018 seconds.
229
230 Creating Data for SVM_RBF_RUN_8
231 Model Made at 0.2419319999999848 seconds
232 Finding Best Fits and Testing Model
233 Created Estimates at 0.04517050000000111 seconds
234 R Squared SCORE:
235 -0.02246676089679478
236 Run Completed at 0.2876174999999964 seconds.
237
238 Creating Data for SVM_RBF_RUN_9
239 Model Made at 0.2248647999999887 seconds
240 Finding Best Fits and Testing Model
241 Created Estimates at 0.0368127999999987 seconds
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242 R Squared SCORE:  
243 -0.019531378676391764  
244 Run Completed at 0.262134499999984 seconds.  
245  
246 Creating Data for SVM_RBF_RUN_10  
247 Model Made at 0.21051350000000113 seconds  
248 Finding Best Fits and Testing Model  
249 Created Estimates at 0.037431500000000284 seconds  
250 R Squared SCORE:  
251 -0.178726235504169  
252 Run Completed at 0.248403599999996 seconds.  
253  
254 SVM_RBF all runs completed at 2.948511500000002  
seconds.  
255 SVM_LINEAR  
256 Creating Data for SVM_LINEAR_RUN_1  
257 Model Made at 0.303379599999995 seconds  
258 Finding Best Fits and Testing Model  
259 Created Estimates at 0.05086220000000097 seconds  
260 R Squared SCORE:  
261 0.1895573980873484  
262 Run Completed at 0.35486540000000133 seconds.  
263  
264 Creating Data for SVM_LINEAR_RUN_2  
265 Model Made at 0.3410378999999999 seconds  
266 Finding Best Fits and Testing Model  
267 Created Estimates at 0.02479389999998814 seconds  
268 R Squared SCORE:  
269 -48.93716392087793  
270 Run Completed at 0.3663506999999814 seconds.  
271  
272 Creating Data for SVM_LINEAR_RUN_3  
273 Model Made at 0.3485438000000016 seconds  
274 Finding Best Fits and Testing Model  
275 Created Estimates at 0.0187626999999991 seconds  
276 R Squared SCORE:  
277 -0.9049687457370594  
278 Run Completed at 0.36787780000000225 seconds.  
279  
280 Creating Data for SVM_LINEAR_RUN_4  
281 Model Made at 0.32453470000000095 seconds
```

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282 Finding Best Fits and Testing Model
283 Created Estimates at 0.022962100000000873 seconds
284 R Squared SCORE:
285 -0.26036201591478325
286 Run Completed at 0.3483237000000017 seconds.
287
288 Creating Data for SVM_LINEAR_RUN_5
289 Model Made at 0.3717499000000011 seconds
290 Finding Best Fits and Testing Model
291 Created Estimates at 0.03766459999999938 seconds
292 R Squared SCORE:
293 -4.103411273125908
294 Run Completed at 0.4101075999999999 seconds.
295
296 Creating Data for SVM_LINEAR_RUN_6
297 Model Made at 0.5393556000000004 seconds
298 Finding Best Fits and Testing Model
299 Created Estimates at 0.01874699999997627 seconds
300 R Squared SCORE:
301 0.38148919607437515
302 Run Completed at 0.558590899999987 seconds.
303
304 Creating Data for SVM_LINEAR_RUN_7
305 Model Made at 0.449289899999966 seconds
306 Finding Best Fits and Testing Model
307 Created Estimates at 0.02958350000001095 seconds
308 R Squared SCORE:
309 -4.920854599018966
310 Run Completed at 0.4794898000000032 seconds.
311
312 Creating Data for SVM_LINEAR_RUN_8
313 Model Made at 0.3957440000000054 seconds
314 Finding Best Fits and Testing Model
315 Created Estimates at 0.02246850000002223 seconds
316 R Squared SCORE:
317 -0.7735667231831047
318 Run Completed at 0.4186967999999993 seconds.
319
320 Creating Data for SVM_LINEAR_RUN_9
321 Model Made at 0.33202909999999974 seconds
322 Finding Best Fits and Testing Model
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323 Created Estimates at 0.0137213000000027 seconds
324 R Squared SCORE:
325 0.6397220745720462
326 Run Completed at 0.34638280000000066 seconds.
327
328 Creating Data for SVM_LINEAR_RUN_10
329 Model Made at 0.28596070000000395 seconds
330 Finding Best Fits and Testing Model
331 Created Estimates at 0.02878429999998098 seconds
332 R Squared SCORE:
333 -5.373090176987459
334 Run Completed at 0.31538770000000227 seconds.
335
336 SVM_LINEAR all runs completed at 3.966858799999997
seconds.
337 SVM_POLY
338 Creating Data for SVM_POLY_RUN_1
339 Model Made at 0.32853090000000407 seconds
340 Finding Best Fits and Testing Model
341 Created Estimates at 0.0206864999999965 seconds
342 R Squared SCORE:
343 0.04026304487048438
344 Run Completed at 0.349726799999991 seconds.
345
346 Creating Data for SVM_POLY_RUN_2
347 Model Made at 0.2864439999999959 seconds
348 Finding Best Fits and Testing Model
349 Created Estimates at 0.0173798000000005 seconds
350 R Squared SCORE:
351 -243.6527898070938
352 Run Completed at 0.304403499999994 seconds.
353
354 Creating Data for SVM_POLY_RUN_3
355 Model Made at 0.3212380999999951 seconds
356 Finding Best Fits and Testing Model
357 Created Estimates at 0.020164999999998656 seconds
358 R Squared SCORE:
359 -0.11782047703413423
360 Run Completed at 0.3418898999999982 seconds.
361
362 Creating Data for SVM_POLY_RUN_4
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363 Model Made at 0.3558676999999746 seconds
364 Finding Best Fits and Testing Model
365 Created Estimates at 0.01754359999996218 seconds
366 R Squared SCORE:
367 -0.07795109819613644
368 Run Completed at 0.3738893999999593 seconds.
369
370 Creating Data for SVM_POLY_RUN_5
371 Model Made at 0.28922720000000623 seconds
372 Finding Best Fits and Testing Model
373 Created Estimates at 0.01670039999997728 seconds
374 R Squared SCORE:
375 -1.0110198880875148
376 Run Completed at 0.3064411000000007 seconds.
377
378 Creating Data for SVM_POLY_RUN_6
379 Model Made at 0.343027400000004 seconds
380 Finding Best Fits and Testing Model
381 Created Estimates at 0.01807389999997423 seconds
382 R Squared SCORE:
383 -0.014603876869037524
384 Run Completed at 0.361598399999983 seconds.
385
386 Creating Data for SVM_POLY_RUN_7
387 Model Made at 0.3351119999999952 seconds
388 Finding Best Fits and Testing Model
389 Created Estimates at 0.01927230000000435 seconds
390 R Squared SCORE:
391 -0.04131583201605227
392 Run Completed at 0.35492320000000177 seconds.
393
394 Creating Data for SVM_POLY_RUN_8
395 Model Made at 0.4392824000000033 seconds
396 Finding Best Fits and Testing Model
397 Created Estimates at 0.03065999999997467 seconds
398 R Squared SCORE:
399 -0.08036816325905871
400 Run Completed at 0.47042979999998 seconds.
401
402 Creating Data for SVM_POLY_RUN_9
403 Model Made at 0.361446399999984 seconds
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404 Finding Best Fits and Testing Model
405 Created Estimates at 0.018755900000002157 seconds
406 R Squared SCORE:
407 0.025248497556617067
408 Run Completed at 0.3806978000000001 seconds.
409
410 Creating Data for SVM_POLY_RUN_10
411 Model Made at 0.368097599999987 seconds
412 Finding Best Fits and Testing Model
413 Created Estimates at 0.03214140000000043 seconds
414 R Squared SCORE:
415 -0.04638128852361745
416 Run Completed at 0.4007085000000036 seconds.
417
418 SVM_POLY all runs completed at 3.6454868000000005
seconds.
419 SVM_SIGMOID
420 Creating Data for SVM_SIGMOID_RUN_1
421 Model Made at 0.4030068 seconds
422 Finding Best Fits and Testing Model
423 Created Estimates at 0.03846740000000182 seconds
424 R Squared SCORE:
425 -0.07586742576953598
426 Run Completed at 0.4420145000000062 seconds.
427
428 Creating Data for SVM_SIGMOID_RUN_2
429 Model Made at 0.48977250000000083 seconds
430 Finding Best Fits and Testing Model
431 Created Estimates at 0.0351561000000018 seconds
432 R Squared SCORE:
433 -0.848597658609572
434 Run Completed at 0.5254442000000026 seconds.
435
436 Creating Data for SVM_SIGMOID_RUN_3
437 Model Made at 0.5218640000000008 seconds
438 Finding Best Fits and Testing Model
439 Created Estimates at 0.022760600000005127 seconds
440 R Squared SCORE:
441 -0.08566641813425901
442 Run Completed at 0.5451847000000001 seconds.
443
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444 Creating Data for SVM_SIGMOID_RUN_4
445 Model Made at 0.3760282999999443 seconds
446 Finding Best Fits and Testing Model
447 Created Estimates at 0.0199775000000309 seconds
448 R Squared SCORE:
449 0.0010805835116697304
450 Run Completed at 0.3964947999999926 seconds.
451
452 Creating Data for SVM_SIGMOID_RUN_5
453 Model Made at 0.3481078999999514 seconds
454 Finding Best Fits and Testing Model
455 Created Estimates at 0.048084299999993 seconds
456 R Squared SCORE:
457 -0.13753601339825816
458 Run Completed at 0.3968652000000006 seconds.
459
460 Creating Data for SVM_SIGMOID_RUN_6
461 Model Made at 0.3426253999999575 seconds
462 Finding Best Fits and Testing Model
463 Created Estimates at 0.0402109000000527 seconds
464 R Squared SCORE:
465 -0.357198453223446
466 Run Completed at 0.383359299999951 seconds.
467
468 Creating Data for SVM_SIGMOID_RUN_7
469 Model Made at 0.4003808000000065 seconds
470 Finding Best Fits and Testing Model
471 Created Estimates at 0.0177404000000099 seconds
472 R Squared SCORE:
473 0.006090283565781118
474 Run Completed at 0.4186905000000385 seconds.
475
476 Creating Data for SVM_SIGMOID_RUN_8
477 Model Made at 0.3813580999999999 seconds
478 Finding Best Fits and Testing Model
479 Created Estimates at 0.01939200000003407 seconds
480 R Squared SCORE:
481 -0.008027138482350926
482 Run Completed at 0.401277399999979 seconds.
483
484 Creating Data for SVM_SIGMOID_RUN_9
```

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485 Model Made at 0.3445025999999844 seconds
486 Finding Best Fits and Testing Model
487 Created Estimates at 0.03102580000000188 seconds
488 R Squared SCORE:
489 -0.8828794489164686
490 Run Completed at 0.3760211999999967 seconds.
491
492 Creating Data for SVM_SIGMOID_RUN_10
493 Model Made at 0.39321050000000213 seconds
494 Finding Best Fits and Testing Model
495 Created Estimates at 0.03375969999997395 seconds
496 R Squared SCORE:
497 -0.05448778631826623
498 Run Completed at 0.427585499999993 seconds.
499
500 SVM_SIGMOID all runs completed at 4.313738300000004
seconds.
501 KNN_Neighbor1
502 Creating Data for KNN_Neighbor1_RUN_1
503 Model Made at 0.0975710999999614 seconds
504 Finding Best Fits and Testing Model
505 Created Estimates at 0.01888380000000467 seconds
506 R Squared SCORE:
507 -0.3107910132811582
508 Run Completed at 0.1169605999999875 seconds.
509
510 Creating Data for KNN_Neighbor1_RUN_2
511 Model Made at 0.1050077999999565 seconds
512 Finding Best Fits and Testing Model
513 Created Estimates at 0.0218221000000014 seconds
514 R Squared SCORE:
515 0.15994556882735378
516 Run Completed at 0.127301799999979 seconds.
517
518 Creating Data for KNN_Neighbor1_RUN_3
519 Model Made at 0.10187530000000322 seconds
520 Finding Best Fits and Testing Model
521 Created Estimates at 0.01908109999993967 seconds
522 R Squared SCORE:
523 -0.3983788090285423
524 Run Completed at 0.1213553999999878 seconds.
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525
526 Creating Data for KNN_Neighbor1_RUN_4
527 Model Made at 0.1191904999999487 seconds
528 Finding Best Fits and Testing Model
529 Created Estimates at 0.02022340000000611 seconds
530 R Squared SCORE:
531 0.17999309930609686
532 Run Completed at 0.1398530999999963 seconds.
533
534 Creating Data for KNN_Neighbor1_RUN_5
535 Model Made at 0.0988874000000024 seconds
536 Finding Best Fits and Testing Model
537 Created Estimates at 0.022719699999996124 seconds
538 R Squared SCORE:
539 0.6368862683722407
540 Run Completed at 0.12210600000000227 seconds.
541
542 Creating Data for KNN_Neighbor1_RUN_6
543 Model Made at 0.1092404999999852 seconds
544 Finding Best Fits and Testing Model
545 Created Estimates at 0.016618600000001038 seconds
546 R Squared SCORE:
547 0.3803314246052403
548 Run Completed at 0.1261989999999973 seconds.
549
550 Creating Data for KNN_Neighbor1_RUN_7
551 Model Made at 0.09873059999999612 seconds
552 Finding Best Fits and Testing Model
553 Created Estimates at 0.020884100000003514 seconds
554 R Squared SCORE:
555 -0.13596915920834718
556 Run Completed at 0.12008019999999675 seconds.
557
558 Creating Data for KNN_Neighbor1_RUN_8
559 Model Made at 0.097738200000002 seconds
560 Finding Best Fits and Testing Model
561 Created Estimates at 0.018166099999994856 seconds
562 R Squared SCORE:
563 -2.633267046494321
564 Run Completed at 0.1164431999999908 seconds.
565
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566 Creating Data for KNN_Neighbor1_RUN_9
567 Model Made at 0.09856460000000311 seconds
568 Finding Best Fits and Testing Model
569 Created Estimates at 0.021458700000003716 seconds
570 R Squared SCORE:
571 0.5601607997447623
572 Run Completed at 0.1205110000000165 seconds.
573
574 Creating Data for KNN_Neighbor1_RUN_10
575 Model Made at 0.10068970000000377 seconds
576 Finding Best Fits and Testing Model
577 Created Estimates at 0.021038900000000638 seconds
578 R Squared SCORE:
579 -1.4469309940937523
580 Run Completed at 0.12217920000000504 seconds.
581
582 KNN_Neighbor1 all runs completed at 1.
      2337976999999967 seconds.
583 KNN_Neighbor3
584 Creating Data for KNN_Neighbor3_RUN_1
585 Model Made at 0.09777960000000263 seconds
586 Finding Best Fits and Testing Model
587 Created Estimates at 0.020688899999996124 seconds
588 R Squared SCORE:
589 -0.3018034729389121
590 Run Completed at 0.11904799999999938 seconds.
591
592 Creating Data for KNN_Neighbor3_RUN_2
593 Model Made at 0.09544559999999791 seconds
594 Finding Best Fits and Testing Model
595 Created Estimates at 0.03188400000000513 seconds
596 R Squared SCORE:
597 0.31259883669632615
598 Run Completed at 0.1278495000000035 seconds.
599
600 Creating Data for KNN_Neighbor3_RUN_3
601 Model Made at 0.09944859999999522 seconds
602 Finding Best Fits and Testing Model
603 Created Estimates at 0.019288800000005324 seconds
604 R Squared SCORE:
605 -0.37945446421264384
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606 Run Completed at 0.11915669999999778 seconds.  
607  
608 Creating Data for KNN_Neighbor3_RUN_4  
609 Model Made at 0.09580249999999779 seconds  
610 Finding Best Fits and Testing Model  
611 Created Estimates at 0.01698160000000115 seconds  
612 R Squared SCORE:  
613 0.03661622941254372  
614 Run Completed at 0.1131710999999953 seconds.  
615  
616 Creating Data for KNN_Neighbor3_RUN_5  
617 Model Made at 0.10600889999999907 seconds  
618 Finding Best Fits and Testing Model  
619 Created Estimates at 0.01808340000000186 seconds  
620 R Squared SCORE:  
621 0.4307539340594567  
622 Run Completed at 0.12463580000000007 seconds.  
623  
624 Creating Data for KNN_Neighbor3_RUN_6  
625 Model Made at 0.09769920000000099 seconds  
626 Finding Best Fits and Testing Model  
627 Created Estimates at 0.01992560000000543 seconds  
628 R Squared SCORE:  
629 -0.30349873013547946  
630 Run Completed at 0.11807569999999856 seconds.  
631  
632 Creating Data for KNN_Neighbor3_RUN_7  
633 Model Made at 0.09161740000000407 seconds  
634 Finding Best Fits and Testing Model  
635 Created Estimates at 0.015971199999995633 seconds  
636 R Squared SCORE:  
637 0.5428255508328887  
638 Run Completed at 0.1079786000000027 seconds.  
639  
640 Creating Data for KNN_Neighbor3_RUN_8  
641 Model Made at 0.10092460000000614 seconds  
642 Finding Best Fits and Testing Model  
643 Created Estimates at 0.03029619999999511 seconds  
644 R Squared SCORE:  
645 0.183869192754458  
646 Run Completed at 0.13171550000000565 seconds.
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647
648 Creating Data for KNN_Neighbor3_RUN_9
649 Model Made at 0.10831879999999927 seconds
650 Finding Best Fits and Testing Model
651 Created Estimates at 0.01879269999998774 seconds
652 R Squared SCORE:
653 0.08956004096611758
654 Run Completed at 0.1275541999999873 seconds.
655
656 Creating Data for KNN_Neighbor3_RUN_10
657 Model Made at 0.10071100000000399 seconds
658 Finding Best Fits and Testing Model
659 Created Estimates at 0.02791229999997003 seconds
660 R Squared SCORE:
661 -0.27624219536430417
662 Run Completed at 0.12902790000000408 seconds.
663
664 KNN_Neighbor3 all runs completed at 1.
2190767000000022 seconds.
665 KNN_Neighbor5
666 Creating Data for KNN_Neighbor5_RUN_1
667 Model Made at 0.1379214999999737 seconds
668 Finding Best Fits and Testing Model
669 Created Estimates at 0.02160930000001497 seconds
670 R Squared SCORE:
671 -0.35917260998036205
672 Run Completed at 0.1599385999999967 seconds.
673
674 Creating Data for KNN_Neighbor5_RUN_2
675 Model Made at 0.1040053999999836 seconds
676 Finding Best Fits and Testing Model
677 Created Estimates at 0.05027120000000451 seconds
678 R Squared SCORE:
679 -0.08609697083187551
680 Run Completed at 0.15493610000000047 seconds.
681
682 Creating Data for KNN_Neighbor5_RUN_3
683 Model Made at 0.09727829999999926 seconds
684 Finding Best Fits and Testing Model
685 Created Estimates at 0.01967030000000136 seconds
686 R Squared SCORE:
```

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687 0.14381911698579608
688 Run Completed at 0.1173877999999593 seconds.
689
690 Creating Data for KNN_Neighbor5_RUN_4
691 Model Made at 0.10109950000000367 seconds
692 Finding Best Fits and Testing Model
693 Created Estimates at 0.04780819999998635 seconds
694 R Squared SCORE:
695 0.043883290720409085
696 Run Completed at 0.14947670000000102 seconds.
697
698 Creating Data for KNN_Neighbor5_RUN_5
699 Model Made at 0.1158275999999581 seconds
700 Finding Best Fits and Testing Model
701 Created Estimates at 0.020483200000001034 seconds
702 R Squared SCORE:
703 0.4721978972281645
704 Run Completed at 0.13673860000000104 seconds.
705
706 Creating Data for KNN_Neighbor5_RUN_6
707 Model Made at 0.1074806999999643 seconds
708 Finding Best Fits and Testing Model
709 Created Estimates at 0.023693200000003856 seconds
710 R Squared SCORE:
711 0.19507468426289365
712 Run Completed at 0.1316891999999673 seconds.
713
714 Creating Data for KNN_Neighbor5_RUN_7
715 Model Made at 0.10776120000000589 seconds
716 Finding Best Fits and Testing Model
717 Created Estimates at 0.02713349999997923 seconds
718 R Squared SCORE:
719 0.3888582670000128
720 Run Completed at 0.1354538000000005 seconds.
721
722 Creating Data for KNN_Neighbor5_RUN_8
723 Model Made at 0.1249842000000001 seconds
724 Finding Best Fits and Testing Model
725 Created Estimates at 0.02098279999998747 seconds
726 R Squared SCORE:
727 -2.6933128249851417
```

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728 Run Completed at 0.14642630000000167 seconds.  
729  
730 Creating Data for KNN_Neighbor5_RUN_9  
731 Model Made at 0.10717609999999667 seconds  
732 Finding Best Fits and Testing Model  
733 Created Estimates at 0.022173600000002125 seconds  
734 R Squared SCORE:  
735 -0.12663551388929273  
736 Run Completed at 0.12985979999999842 seconds.  
737  
738 Creating Data for KNN_Neighbor5_RUN_10  
739 Model Made at 0.10060319999999479 seconds  
740 Finding Best Fits and Testing Model  
741 Created Estimates at 0.02506180000000313 seconds  
742 R Squared SCORE:  
743 -1.476512907750998  
744 Run Completed at 0.12620429999999772 seconds.  
745  
746 KNN_Neighbor5 all runs completed at 1.  
388919299999977 seconds.  
747 KNN_Neighbor7  
748 Creating Data for KNN_Neighbor7_RUN_1  
749 Model Made at 0.1062841999999975 seconds  
750 Finding Best Fits and Testing Model  
751 Created Estimates at 0.020876700000002302 seconds  
752 R Squared SCORE:  
753 0.19081737187726788  
754 Run Completed at 0.1276329999999959 seconds.  
755  
756 Creating Data for KNN_Neighbor7_RUN_2  
757 Model Made at 0.10842050000000114 seconds  
758 Finding Best Fits and Testing Model  
759 Created Estimates at 0.026382699999999204 seconds  
760 R Squared SCORE:  
761 0.6197216636708678  
762 Run Completed at 0.1352894000000049 seconds.  
763  
764 Creating Data for KNN_Neighbor7_RUN_3  
765 Model Made at 0.10896779999999495 seconds  
766 Finding Best Fits and Testing Model  
767 Created Estimates at 0.018803100000006623 seconds
```

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768 R Squared SCORE:  
769 0.04285978892772402  
770 Run Completed at 0.1282075999999961 seconds.  
771  
772 Creating Data for KNN_Neighbor7_RUN_4  
773 Model Made at 0.09957789999999989 seconds  
774 Finding Best Fits and Testing Model  
775 Created Estimates at 0.02045360000000329 seconds  
776 R Squared SCORE:  
777 -2.6007358127815627  
778 Run Completed at 0.12044130000000308 seconds.  
779  
780 Creating Data for KNN_Neighbor7_RUN_5  
781 Model Made at 0.10624969999999934 seconds  
782 Finding Best Fits and Testing Model  
783 Created Estimates at 0.018725700000004508 seconds  
784 R Squared SCORE:  
785 0.3500320268828062  
786 Run Completed at 0.12538280000000412 seconds.  
787  
788 Creating Data for KNN_Neighbor7_RUN_6  
789 Model Made at 0.1026385999999988 seconds  
790 Finding Best Fits and Testing Model  
791 Created Estimates at 0.01832209999998898 seconds  
792 R Squared SCORE:  
793 -0.18978498463030924  
794 Run Completed at 0.1214650000000006 seconds.  
795  
796 Creating Data for KNN_Neighbor7_RUN_7  
797 Model Made at 0.10024119999999925 seconds  
798 Finding Best Fits and Testing Model  
799 Created Estimates at 0.02118859999995006 seconds  
800 R Squared SCORE:  
801 -0.001906248956345058  
802 Run Completed at 0.1218727999999845 seconds.  
803  
804 Creating Data for KNN_Neighbor7_RUN_8  
805 Model Made at 0.09764290000000386 seconds  
806 Finding Best Fits and Testing Model  
807 Created Estimates at 0.01603149999996868 seconds  
808 R Squared SCORE:
```

```
809 -0.4023535363659838
810 Run Completed at 0.11405740000000009 seconds.
811
812 Creating Data for KNN_Neighbor7_RUN_9
813 Model Made at 0.1065839999999801 seconds
814 Finding Best Fits and Testing Model
815 Created Estimates at 0.017117100000000107 seconds
816 R Squared SCORE:
817 -0.381215108657869
818 Run Completed at 0.1241185999999564 seconds.
819
820 Creating Data for KNN_Neighbor7_RUN_10
821 Model Made at 0.1013708999999915 seconds
822 Finding Best Fits and Testing Model
823 Created Estimates at 0.021196400000000892 seconds
824 R Squared SCORE:
825 -2.350943682816639
826 Run Completed at 0.1230499999999922 seconds.
827
828 KNN_Neighbor7 all runs completed at 1.
2423286000000004 seconds.
829 KNN_Neighbor9
830 Creating Data for KNN_Neighbor9_RUN_1
831 Model Made at 0.08927840000000486 seconds
832 Finding Best Fits and Testing Model
833 Created Estimates at 0.0190348000000002 seconds
834 R Squared SCORE:
835 -0.0005734668826231637
836 Run Completed at 0.1088152000000222 seconds.
837
838 Creating Data for KNN_Neighbor9_RUN_2
839 Model Made at 0.0982576999999778 seconds
840 Finding Best Fits and Testing Model
841 Created Estimates at 0.01952720000005962 seconds
842 R Squared SCORE:
843 0.029275847641862862
844 Run Completed at 0.1182091000000014 seconds.
845
846 Creating Data for KNN_Neighbor9_RUN_3
847 Model Made at 0.10471940000000046 seconds
848 Finding Best Fits and Testing Model
```

```
849 Created Estimates at 0.01669809999999272 seconds
850 R Squared SCORE:
851 0.2628229940593543
852 Run Completed at 0.12182360000000614 seconds.
853
854 Creating Data for KNN_Neighbor9_RUN_4
855 Model Made at 0.1041613000000123 seconds
856 Finding Best Fits and Testing Model
857 Created Estimates at 0.01889930000001062 seconds
858 R Squared SCORE:
859 -0.5983871727114678
860 Run Completed at 0.12351650000000092 seconds.
861
862 Creating Data for KNN_Neighbor9_RUN_5
863 Model Made at 0.1022902999999995 seconds
864 Finding Best Fits and Testing Model
865 Created Estimates at 0.02124330000001852 seconds
866 R Squared SCORE:
867 0.0321489315771899
868 Run Completed at 0.1240029000000007 seconds.
869
870 Creating Data for KNN_Neighbor9_RUN_6
871 Model Made at 0.0937789999999784 seconds
872 Finding Best Fits and Testing Model
873 Created Estimates at 0.01766340000000355 seconds
874 R Squared SCORE:
875 0.019588077576374596
876 Run Completed at 0.1118627999999726 seconds.
877
878 Creating Data for KNN_Neighbor9_RUN_7
879 Model Made at 0.1071787999999998 seconds
880 Finding Best Fits and Testing Model
881 Created Estimates at 0.01781010000000549 seconds
882 R Squared SCORE:
883 -1.2273366538469626
884 Run Completed at 0.12548400000000015 seconds.
885
886 Creating Data for KNN_Neighbor9_RUN_8
887 Model Made at 0.0970665999999998 seconds
888 Finding Best Fits and Testing Model
889 Created Estimates at 0.02130789999996494 seconds
```

```
890 R Squared SCORE:  
891 -3.585174705910351  
892 Run Completed at 0.11876429999999516 seconds.  
893  
894 Creating Data for KNN_Neighbor9_RUN_9  
895 Model Made at 0.09530139999999676 seconds  
896 Finding Best Fits and Testing Model  
897 Created Estimates at 0.0234842999999979 seconds  
898 R Squared SCORE:  
899 -0.08308780881915223  
900 Run Completed at 0.11919919999999706 seconds.  
901  
902 Creating Data for KNN_Neighbor9_RUN_10  
903 Model Made at 0.0972435000000047 seconds  
904 Finding Best Fits and Testing Model  
905 Created Estimates at 0.018427199999997868 seconds  
906 R Squared SCORE:  
907 -0.11667114983600091  
908 Run Completed at 0.11633679999999913 seconds.  
909  
910 KNN_Neighbor9 all runs completed at 1.  
1888332000000048 seconds.  
911 DescTree_NoMaxDepth  
912 Creating Data for DescTree_NoMaxDepth_RUN_1  
913 Model Made at 0.8326702000000026 seconds  
914 Finding Best Fits and Testing Model  
915 Created Estimates at 0.0015933999999973025 seconds  
916 R Squared SCORE:  
917 -2.574302626102774  
918 Run Completed at 0.8347341000000057 seconds.  
919  
920 Creating Data for DescTree_NoMaxDepth_RUN_2  
921 Model Made at 0.7855986000000001 seconds  
922 Finding Best Fits and Testing Model  
923 Created Estimates at 0.001488599999994733 seconds  
924 R Squared SCORE:  
925 -1.3495787502925345  
926 Run Completed at 0.7873835999999983 seconds.  
927  
928 Creating Data for DescTree_NoMaxDepth_RUN_3  
929 Model Made at 0.727573299999996 seconds
```

```
930 Finding Best Fits and Testing Model
931 Created Estimates at 0.00214930000006349 seconds
932 R Squared SCORE:
933 0.4174388390449576
934 Run Completed at 0.7303171000000006 seconds.
935
936 Creating Data for DescTree_NoMaxDepth_RUN_4
937 Model Made at 0.677731399999999 seconds
938 Finding Best Fits and Testing Model
939 Created Estimates at 0.001306899999995892 seconds
940 R Squared SCORE:
941 0.2350228446987489
942 Run Completed at 0.6795712999999992 seconds.
943
944 Creating Data for DescTree_NoMaxDepth_RUN_5
945 Model Made at 0.7575415000000021 seconds
946 Finding Best Fits and Testing Model
947 Created Estimates at 0.001761599999947007 seconds
948 R Squared SCORE:
949 -1.9504856337951355
950 Run Completed at 0.7598255999999992 seconds.
951
952 Creating Data for DescTree_NoMaxDepth_RUN_6
953 Model Made at 0.8718957999999972 seconds
954 Finding Best Fits and Testing Model
955 Created Estimates at 0.002182400000023602 seconds
956 R Squared SCORE:
957 -0.10781850958225458
958 Run Completed at 0.8745195999999993 seconds.
959
960 Creating Data for DescTree_NoMaxDepth_RUN_7
961 Model Made at 0.932735699999995 seconds
962 Finding Best Fits and Testing Model
963 Created Estimates at 0.001297200000003329 seconds
964 R Squared SCORE:
965 -0.0999255603494229
966 Run Completed at 0.9344465 seconds.
967
968 Creating Data for DescTree_NoMaxDepth_RUN_8
969 Model Made at 0.7654698999999994 seconds
970 Finding Best Fits and Testing Model
```

```
971 Created Estimates at 0.00143030000000266 seconds
972 R Squared SCORE:
973 0.0871030887650508
974 Run Completed at 0.767200299999999 seconds.
975
976 Creating Data for DescTree_NoMaxDepth_RUN_9
977 Model Made at 0.6611430000000027 seconds
978 Finding Best Fits and Testing Model
979 Created Estimates at 0.001948499999974661 seconds
980 R Squared SCORE:
981 0.14396422411218956
982 Run Completed at 0.6634997000000027 seconds.
983
984 Creating Data for DescTree_NoMaxDepth_RUN_10
985 Model Made at 0.6070532999999969 seconds
986 Finding Best Fits and Testing Model
987 Created Estimates at 0.0014814000000029637 seconds
988 R Squared SCORE:
989 -0.5240850527737204
990 Run Completed at 0.6088407000000018 seconds.
991
992 DescTree_NoMaxDepth all runs completed at 7.6411807
seconds.
993 DescTree_MaxDepth100
994 Creating Data for DescTree_MaxDepth100_RUN_1
995 Model Made at 0.7786469999999994 seconds
996 Finding Best Fits and Testing Model
997 Created Estimates at 0.0026266000000063627 seconds
998 R Squared SCORE:
999 -1.3123561042325145
1000 Run Completed at 0.7817456000000007 seconds.
1001
1002 Creating Data for DescTree_MaxDepth100_RUN_2
1003 Model Made at 0.9098977000000019 seconds
1004 Finding Best Fits and Testing Model
1005 Created Estimates at 0.00225189999999742 seconds
1006 R Squared SCORE:
1007 -2.186996181045955
1008 Run Completed at 0.912610499999995 seconds.
1009
1010 Creating Data for DescTree_MaxDepth100_RUN_3
```

```
1011 Model Made at 1.0518494000000018 seconds
1012 Finding Best Fits and Testing Model
1013 Created Estimates at 0.001767499999996999 seconds
1014 R Squared SCORE:
1015 -3.3274848572897344
1016 Run Completed at 1.0539401999999995 seconds.
1017
1018 Creating Data for DescTree_MaxDepth100_RUN_4
1019 Model Made at 0.8147011999999947 seconds
1020 Finding Best Fits and Testing Model
1021 Created Estimates at 0.0014439000000052715 seconds
1022 R Squared SCORE:
1023 -0.8369252762591928
1024 Run Completed at 0.8166385999999974 seconds.
1025
1026 Creating Data for DescTree_MaxDepth100_RUN_5
1027 Model Made at 0.8808763999999982 seconds
1028 Finding Best Fits and Testing Model
1029 Created Estimates at 0.0019729000000054953 seconds
1030 R Squared SCORE:
1031 -0.2436904569516325
1032 Run Completed at 0.8835851000000048 seconds.
1033
1034 Creating Data for DescTree_MaxDepth100_RUN_6
1035 Model Made at 0.8664324999999948 seconds
1036 Finding Best Fits and Testing Model
1037 Created Estimates at 0.008369200000004184 seconds
1038 R Squared SCORE:
1039 0.06959824859278929
1040 Run Completed at 0.8752520999999973 seconds.
1041
1042 Creating Data for DescTree_MaxDepth100_RUN_7
1043 Model Made at 0.9255431999999999 seconds
1044 Finding Best Fits and Testing Model
1045 Created Estimates at 0.001478099999999267 seconds
1046 R Squared SCORE:
1047 -1.8572966048625776
1048 Run Completed at 0.9273335999999972 seconds.
1049
1050 Creating Data for DescTree_MaxDepth100_RUN_8
1051 Model Made at 0.8892477999999997 seconds
```

```
1052 Finding Best Fits and Testing Model
1053 Created Estimates at 0.0023678000000018073 seconds
1054 R Squared SCORE:
1055 -0.36364959521448004
1056 Run Completed at 0.8921257000000011 seconds.
1057
1058 Creating Data for DescTree_MaxDepth100_RUN_9
1059 Model Made at 1.0198006999999976 seconds
1060 Finding Best Fits and Testing Model
1061 Created Estimates at 0.002153200000009292 seconds
1062 R Squared SCORE:
1063 -3.490579079058323
1064 Run Completed at 1.0224662000000038 seconds.
1065
1066 Creating Data for DescTree_MaxDepth100_RUN_10
1067 Model Made at 0.7867552000000018 seconds
1068 Finding Best Fits and Testing Model
1069 Created Estimates at 0.002319200000002297 seconds
1070 R Squared SCORE:
1071 -0.04082700421940921
1072 Run Completed at 0.7895859999999999 seconds.
1073
1074 DescTree_MaxDepth100 all runs completed at 8.
      955998700000002 seconds.
1075 DescTree_MaxDepth500
1076 Creating Data for DescTree_MaxDepth500_RUN_1
1077 Model Made at 0.817971 seconds
1078 Finding Best Fits and Testing Model
1079 Created Estimates at 0.001497299999996926 seconds
1080 R Squared SCORE:
1081 -0.08894568556200344
1082 Run Completed at 0.819741999999909 seconds.
1083
1084 Creating Data for DescTree_MaxDepth500_RUN_2
1085 Model Made at 0.6036698000000058 seconds
1086 Finding Best Fits and Testing Model
1087 Created Estimates at 0.0016889999999989413 seconds
1088 R Squared SCORE:
1089 -1.3818200226168638
1090 Run Completed at 0.6056995999999941 seconds.
1091
```

```
1092 Creating Data for DescTree_MaxDepth500_RUN_3
1093 Model Made at 0.5874969999999999 seconds
1094 Finding Best Fits and Testing Model
1095 Created Estimates at 0.002353999999968586 seconds
1096 R Squared SCORE:
1097 -1.0784596522185201
1098 Run Completed at 0.5903119000000032 seconds.
1099
1100 Creating Data for DescTree_MaxDepth500_RUN_4
1101 Model Made at 0.7623972000000094 seconds
1102 Finding Best Fits and Testing Model
1103 Created Estimates at 0.002080699999993385 seconds
1104 R Squared SCORE:
1105 -0.8544073691136385
1106 Run Completed at 0.7648848999999984 seconds.
1107
1108 Creating Data for DescTree_MaxDepth500_RUN_5
1109 Model Made at 0.9370890999999943 seconds
1110 Finding Best Fits and Testing Model
1111 Created Estimates at 0.002069300000002272 seconds
1112 R Squared SCORE:
1113 -1.4255850818067155
1114 Run Completed at 0.9397458999999913 seconds.
1115
1116 Creating Data for DescTree_MaxDepth500_RUN_6
1117 Model Made at 1.0906025000000028 seconds
1118 Finding Best Fits and Testing Model
1119 Created Estimates at 0.0013564000000059195 seconds
1120 R Squared SCORE:
1121 -0.9723833966360613
1122 Run Completed at 1.092246000000003 seconds.
1123
1124 Creating Data for DescTree_MaxDepth500_RUN_7
1125 Model Made at 0.7764303000000012 seconds
1126 Finding Best Fits and Testing Model
1127 Created Estimates at 0.0019498999999996158 seconds
1128 R Squared SCORE:
1129 -1.1687643001430432
1130 Run Completed at 0.7787198999999987 seconds.
1131
1132 Creating Data for DescTree_MaxDepth500_RUN_8
```

```
1133 Model Made at 0.886676799999894 seconds
1134 Finding Best Fits and Testing Model
1135 Created Estimates at 0.002191700000011565 seconds
1136 R Squared SCORE:
1137 -0.5714157044295931
1138 Run Completed at 0.8893674999999917 seconds.
1139
1140 Creating Data for DescTree_MaxDepth500_RUN_9
1141 Model Made at 0.8770310999999964 seconds
1142 Finding Best Fits and Testing Model
1143 Created Estimates at 0.0013949000000081924 seconds
1144 R Squared SCORE:
1145 -1.5123988232752175
1146 Run Completed at 0.878872599999994 seconds.
1147
1148 Creating Data for DescTree_MaxDepth500_RUN_10
1149 Model Made at 0.879394199999993 seconds
1150 Finding Best Fits and Testing Model
1151 Created Estimates at 0.0018345999999951346 seconds
1152 R Squared SCORE:
1153 -5.033624930678545
1154 Run Completed at 0.8817102999999946 seconds.
1155
1156 DescTree_MaxDepth500 all runs completed at 8.
241990699999988 seconds.
1157 DescTree_MaxDepth1000
1158 Creating Data for DescTree_MaxDepth1000_RUN_1
1159 Model Made at 1.1332629000000054 seconds
1160 Finding Best Fits and Testing Model
1161 Created Estimates at 0.002279099999955375 seconds
1162 R Squared SCORE:
1163 -1.1748619313780209
1164 Run Completed at 1.1360881000000091 seconds.
1165
1166 Creating Data for DescTree_MaxDepth1000_RUN_2
1167 Model Made at 0.8537062999999989 seconds
1168 Finding Best Fits and Testing Model
1169 Created Estimates at 0.0015766000000070335 seconds
1170 R Squared SCORE:
1171 -0.30686074426929677
1172 Run Completed at 0.8556794999999937 seconds.
```

```
1173
1174 Creating Data for DescTree_MaxDepth1000_RUN_3
1175 Model Made at 0.7066496999999998 seconds
1176 Finding Best Fits and Testing Model
1177 Created Estimates at 0.001344799999982585 seconds
1178 R Squared SCORE:
1179 -1.5264889343514434
1180 Run Completed at 0.7082797000000056 seconds.
1181
1182 Creating Data for DescTree_MaxDepth1000_RUN_4
1183 Model Made at 0.6177204000000103 seconds
1184 Finding Best Fits and Testing Model
1185 Created Estimates at 0.001412799999971053 seconds
1186 R Squared SCORE:
1187 -0.2786845952877448
1188 Run Completed at 0.6195820000000083 seconds.
1189
1190 Creating Data for DescTree_MaxDepth1000_RUN_5
1191 Model Made at 0.6806872000000084 seconds
1192 Finding Best Fits and Testing Model
1193 Created Estimates at 0.001250599999991664 seconds
1194 R Squared SCORE:
1195 -1.8687299023080177
1196 Run Completed at 0.6823544000000084 seconds.
1197
1198 Creating Data for DescTree_MaxDepth1000_RUN_6
1199 Model Made at 0.7291157000000084 seconds
1200 Finding Best Fits and Testing Model
1201 Created Estimates at 0.0015015000000033751 seconds
1202 R Squared SCORE:
1203 0.8751867251728892
1204 Run Completed at 0.7310098000000096 seconds.
1205
1206 Creating Data for DescTree_MaxDepth1000_RUN_7
1207 Model Made at 0.9609731000000039 seconds
1208 Finding Best Fits and Testing Model
1209 Created Estimates at 0.0026563999999922316 seconds
1210 R Squared SCORE:
1211 -1.8625945078763673
1212 Run Completed at 0.964124999999957 seconds.
1213
```

```
1214 Creating Data for DescTree_MaxDepth1000_RUN_8
1215 Model Made at 1.044994399999993 seconds
1216 Finding Best Fits and Testing Model
1217 Created Estimates at 0.002442799999971917 seconds
1218 R Squared SCORE:
1219 0.2233135515826289
1220 Run Completed at 1.0477567999999877 seconds.
1221
1222 Creating Data for DescTree_MaxDepth1000_RUN_9
1223 Model Made at 0.837163799999999 seconds
1224 Finding Best Fits and Testing Model
1225 Created Estimates at 0.001409999999992806 seconds
1226 R Squared SCORE:
1227 -0.6240394540658332
1228 Run Completed at 0.8388680999999991 seconds.
1229
1230 Creating Data for DescTree_MaxDepth1000_RUN_10
1231 Model Made at 0.853621000000004 seconds
1232 Finding Best Fits and Testing Model
1233 Created Estimates at 0.002677500000004329 seconds
1234 R Squared SCORE:
1235 -0.3780662098814722
1236 Run Completed at 0.8568665000000095 seconds.
1237
1238 DescTree_MaxDepth1000 all runs completed at 8.
        441289400000002 seconds.
1239 RandomForest_MaxTrees50
1240 Creating Data for RandomForest_MaxTrees50_RUN_1
1241 Model Made at 22.13485139999988 seconds
1242 Finding Best Fits and Testing Model
1243 Created Estimates at 0.009055400000008262 seconds
1244 R Squared SCORE:
1245 0.1423562323360298
1246 Run Completed at 22.14442409999995 seconds.
1247
1248 Creating Data for RandomForest_MaxTrees50_RUN_2
1249 Model Made at 20.00073520000001 seconds
1250 Finding Best Fits and Testing Model
1251 Created Estimates at 0.004168800000002193 seconds
1252 R Squared SCORE:
1253 -0.5042825878657538
```

```
1254 Run Completed at 20.00515340000001 seconds.  
1255  
1256 Creating Data for RandomForest_MaxTrees50_RUN_3  
1257 Model Made at 19.01914669999993 seconds  
1258 Finding Best Fits and Testing Model  
1259 Created Estimates at 0.0082781000000125 seconds  
1260 R Squared SCORE:  
1261 0.1949275849368266  
1262 Run Completed at 19.028000200000008 seconds.  
1263  
1264 Creating Data for RandomForest_MaxTrees50_RUN_4  
1265 Model Made at 22.18628619999984 seconds  
1266 Finding Best Fits and Testing Model  
1267 Created Estimates at 0.009285500000004276 seconds  
1268 R Squared SCORE:  
1269 -0.13245860338604087  
1270 Run Completed at 22.196061999999984 seconds.  
1271  
1272 Creating Data for RandomForest_MaxTrees50_RUN_5  
1273 Model Made at 20.633729700000004 seconds  
1274 Finding Best Fits and Testing Model  
1275 Created Estimates at 0.00504779999999825 seconds  
1276 R Squared SCORE:  
1277 0.1497852039101777  
1278 Run Completed at 20.63909509999999 seconds.  
1279  
1280 Creating Data for RandomForest_MaxTrees50_RUN_6  
1281 Model Made at 17.896094799999986 seconds  
1282 Finding Best Fits and Testing Model  
1283 Created Estimates at 0.0051167000000020835 seconds  
1284 R Squared SCORE:  
1285 -0.06568073448857503  
1286 Run Completed at 17.901521400000007 seconds.  
1287  
1288 Creating Data for RandomForest_MaxTrees50_RUN_7  
1289 Model Made at 20.39252609999998 seconds  
1290 Finding Best Fits and Testing Model  
1291 Created Estimates at 0.004992700000002515 seconds  
1292 R Squared SCORE:  
1293 0.20373691736144106  
1294 Run Completed at 20.39790260000001 seconds.
```

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1295
1296 Creating Data for RandomForest_MaxTrees50_RUN_8
1297 Model Made at 19.141143199999988 seconds
1298 Finding Best Fits and Testing Model
1299 Created Estimates at 0.004702100000002929 seconds
1300 R Squared SCORE:
1301 -0.5888701501370754
1302 Run Completed at 19.14625739999996 seconds.
1303
1304 Creating Data for RandomForest_MaxTrees50_RUN_9
1305 Model Made at 19.22056919999997 seconds
1306 Finding Best Fits and Testing Model
1307 Created Estimates at 0.004509100000007038 seconds
1308 R Squared SCORE:
1309 0.49087021511691986
1310 Run Completed at 19.225338300000004 seconds.
1311
1312 Creating Data for RandomForest_MaxTrees50_RUN_10
1313 Model Made at 20.122411 seconds
1314 Finding Best Fits and Testing Model
1315 Created Estimates at 0.0047804999999812026 seconds
1316 R Squared SCORE:
1317 -0.7409775482601746
1318 Run Completed at 20.12763030000002 seconds.
1319
1320 RandomForest_MaxTrees50 all runs completed at 200.
     81207999999998 seconds.
1321 RandomForest_MaxTrees100
1322 Creating Data for RandomForest_MaxTrees100_RUN_1
1323 Model Made at 42.48495320000001 seconds
1324 Finding Best Fits and Testing Model
1325 Created Estimates at 0.013394399999981488 seconds
1326 R Squared SCORE:
1327 -0.5397653979777519
1328 Run Completed at 42.49881879999998 seconds.
1329
1330 Creating Data for RandomForest_MaxTrees100_RUN_2
1331 Model Made at 44.96212579999997 seconds
1332 Finding Best Fits and Testing Model
1333 Created Estimates at 0.008965400000022328 seconds
1334 R Squared SCORE:
```

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1335 -0.5661804164122213
1336 Run Completed at 44.97145039999998 seconds.
1337
1338 Creating Data for RandomForest_MaxTrees100_RUN_3
1339 Model Made at 42.823463300000014 seconds
1340 Finding Best Fits and Testing Model
1341 Created Estimates at 0.0073487999998387 seconds
1342 R Squared SCORE:
1343 -0.11361992018374512
1344 Run Completed at 42.831276600000024 seconds.
1345
1346 Creating Data for RandomForest_MaxTrees100_RUN_4
1347 Model Made at 40.76670969999998 seconds
1348 Finding Best Fits and Testing Model
1349 Created Estimates at 0.0125386000000276 seconds
1350 R Squared SCORE:
1351 0.12434555199491504
1352 Run Completed at 40.77970640000001 seconds.
1353
1354 Creating Data for RandomForest_MaxTrees100_RUN_5
1355 Model Made at 37.054113900000004 seconds
1356 Finding Best Fits and Testing Model
1357 Created Estimates at 0.009261700000024575 seconds
1358 R Squared SCORE:
1359 -0.16981810709407252
1360 Run Completed at 37.063845000000015 seconds.
1361
1362 Creating Data for RandomForest_MaxTrees100_RUN_6
1363 Model Made at 36.60418599999997 seconds
1364 Finding Best Fits and Testing Model
1365 Created Estimates at 0.011374100000011822 seconds
1366 R Squared SCORE:
1367 0.20860961216162055
1368 Run Completed at 36.61597790000002 seconds.
1369
1370 Creating Data for RandomForest_MaxTrees100_RUN_7
1371 Model Made at 36.47397269999999 seconds
1372 Finding Best Fits and Testing Model
1373 Created Estimates at 0.0076869000000669985 seconds
1374 R Squared SCORE:
1375 -0.13713736353574513
```

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1376 Run Completed at 36.4819622 seconds.  
1377  
1378 Creating Data for RandomForest_MaxTrees100_RUN_8  
1379 Model Made at 38.8976887 seconds  
1380 Finding Best Fits and Testing Model  
1381 Created Estimates at 0.007085500000016509 seconds  
1382 R Squared SCORE:  
1383 0.16501460347345231  
1384 Run Completed at 38.90502809999998 seconds.  
1385  
1386 Creating Data for RandomForest_MaxTrees100_RUN_9  
1387 Model Made at 38.52014389999994 seconds  
1388 Finding Best Fits and Testing Model  
1389 Created Estimates at 0.011698499999965861 seconds  
1390 R Squared SCORE:  
1391 0.38098639463898654  
1392 Run Completed at 38.53228869999998 seconds.  
1393  
1394 Creating Data for RandomForest_MaxTrees100_RUN_10  
1395 Model Made at 41.942025799999 seconds  
1396 Finding Best Fits and Testing Model  
1397 Created Estimates at 0.012287600000036036 seconds  
1398 R Squared SCORE:  
1399 0.27203607358374304  
1400 Run Completed at 41.95475739999995 seconds.  
1401  
1402 RandomForest_MaxTrees100 all runs completed at 400.  
6357308 seconds.  
1403 RandomForest_MaxTrees150  
1404 Creating Data for RandomForest_MaxTrees150_RUN_1  
1405 Model Made at 67.85191800000007 seconds  
1406 Finding Best Fits and Testing Model  
1407 Created Estimates at 0.019026599999961036 seconds  
1408 R Squared SCORE:  
1409 0.2509162242305786  
1410 Run Completed at 67.87132770000005 seconds.  
1411  
1412 Creating Data for RandomForest_MaxTrees150_RUN_2  
1413 Model Made at 68.9745346999994 seconds  
1414 Finding Best Fits and Testing Model  
1415 Created Estimates at 0.024581200000056924 seconds
```

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1416 R Squared SCORE:  
1417 0.1944366454361598  
1418 Run Completed at 68.9996094999999 seconds.  
1419  
1420 Creating Data for RandomForest_MaxTrees150_RUN_3  
1421 Model Made at 63.9233434999999 seconds  
1422 Finding Best Fits and Testing Model  
1423 Created Estimates at 0.01302530000009483 seconds  
1424 R Squared SCORE:  
1425 0.10011949515628893  
1426 Run Completed at 63.936680900000056 seconds.  
1427  
1428 Creating Data for RandomForest_MaxTrees150_RUN_4  
1429 Model Made at 64.54404150000005 seconds  
1430 Finding Best Fits and Testing Model  
1431 Created Estimates at 0.017460899999946378 seconds  
1432 R Squared SCORE:  
1433 0.2518294078786517  
1434 Run Completed at 64.56184000000007 seconds.  
1435  
1436 Creating Data for RandomForest_MaxTrees150_RUN_5  
1437 Model Made at 64.81856429999993 seconds  
1438 Finding Best Fits and Testing Model  
1439 Created Estimates at 0.0131059999999934 seconds  
1440 R Squared SCORE:  
1441 0.11220016892992346  
1442 Run Completed at 64.83213330000001 seconds.  
1443  
1444 Creating Data for RandomForest_MaxTrees150_RUN_6  
1445 Model Made at 62.863002699999925 seconds  
1446 Finding Best Fits and Testing Model  
1447 Created Estimates at 0.020490500000050815 seconds  
1448 R Squared SCORE:  
1449 -0.9777753274388763  
1450 Run Completed at 62.88408729999992 seconds.  
1451  
1452 Creating Data for RandomForest_MaxTrees150_RUN_7  
1453 Model Made at 65.09385899999984 seconds  
1454 Finding Best Fits and Testing Model  
1455 Created Estimates at 0.01531169999998383 seconds  
1456 R Squared SCORE:
```

```
1457 0.24460020452465692
1458 Run Completed at 65.1096908999998 seconds.
1459
1460 Creating Data for RandomForest_MaxTrees150_RUN_8
1461 Model Made at 63.562735700000076 seconds
1462 Finding Best Fits and Testing Model
1463 Created Estimates at 0.016151299999819457 seconds
1464 R Squared SCORE:
1465 -0.19476320075522113
1466 Run Completed at 63.57920289999993 seconds.
1467
1468 Creating Data for RandomForest_MaxTrees150_RUN_9
1469 Model Made at 64.27987919999987 seconds
1470 Finding Best Fits and Testing Model
1471 Created Estimates at 0.010700100000121893 seconds
1472 R Squared SCORE:
1473 -1.1889985979312416
1474 Run Completed at 64.29089270000009 seconds.
1475
1476 Creating Data for RandomForest_MaxTrees150_RUN_10
1477 Model Made at 68.26182330000006 seconds
1478 Finding Best Fits and Testing Model
1479 Created Estimates at 0.018906699999888588 seconds
1480 R Squared SCORE:
1481 -0.1560542605477213
1482 Run Completed at 68.28121329999999 seconds.
1483
1484 RandomForest_MaxTrees150 all runs completed at 654.
      3473461 seconds.
1485 R^2 SCORES GREATEST TO LOWEST:
1486 DescTree_MaxDepth1000_RUN_6: 0.8751867251728892
1487 Linear_Regression_RUN_8: 0.8370002016819568
1488 Linear_Regression_RUN_7: 0.6567407268267509
1489 SVM_LINEAR_RUN_9: 0.6397220745720462
1490 KNN_Neighbor1_RUN_5: 0.6368862683722407
1491 KNN_Neighbor7_RUN_2: 0.6197216636708678
1492 Lasso_Regression_RUN_9: 0.5963832123286446
1493 KNN_Neighbor1_RUN_9: 0.5601607997447623
1494 KNN_Neighbor3_RUN_7: 0.5428255508328887
1495 Lasso_Regression_RUN_7: 0.5158700431521505
1496 RandomForest_MaxTrees50_RUN_9: 0.49087021511691986
```

1497	KNN_Neighbor5_RUN_5:	0.4721978972281645
1498	KNN_Neighbor3_RUN_5:	0.4307539340594567
1499	DescTree_NoMaxDepth_RUN_3:	0.4174388390449576
1500	KNN_Neighbor5_RUN_7:	0.3888582670000128
1501	SVM_LINEAR_RUN_6:	0.38148919607437515
1502	RandomForest_MaxTrees100_RUN_9:	0.38098639463898654
1503	KNN_Neighbor1_RUN_6:	0.3803314246052403
1504	Linear_Regression_RUN_10:	0.3639466520336061
1505	KNN_Neighbor7_RUN_5:	0.3500320268828062
1506	KNN_Neighbor3_RUN_2:	0.31259883669632615
1507	RandomForest_MaxTrees100_RUN_10:	0. 27203607358374304
1508	KNN_Neighbor9_RUN_3:	0.2628229940593543
1509	RandomForest_MaxTrees150_RUN_4:	0.2518294078786517
1510	RandomForest_MaxTrees150_RUN_1:	0.2509162242305786
1511	RandomForest_MaxTrees150_RUN_7:	0.24460020452465692
1512	DescTree_NoMaxDepth_RUN_4:	0.2350228446987489
1513	DescTree_MaxDepth1000_RUN_8:	0.2233135515826289
1514	RandomForest_MaxTrees100_RUN_6:	0.20860961216162055
1515	RandomForest_MaxTrees50_RUN_7:	0.20373691736144106
1516	KNN_Neighbor5_RUN_6:	0.19507468426289365
1517	RandomForest_MaxTrees50_RUN_3:	0.1949275849368266
1518	RandomForest_MaxTrees150_RUN_2:	0.1944366454361598
1519	KNN_Neighbor7_RUN_1:	0.19081737187726788
1520	SVM_LINEAR_RUN_1:	0.1895573980873484
1521	KNN_Neighbor3_RUN_8:	0.183869192754458
1522	KNN_Neighbor1_RUN_4:	0.17999309930609686
1523	RandomForest_MaxTrees100_RUN_8:	0.16501460347345231
1524	KNN_Neighbor1_RUN_2:	0.15994556882735378
1525	Lasso_Regression_RUN_8:	0.15822689646694554
1526	RandomForest_MaxTrees50_RUN_5:	0.1497852039101777
1527	Linear_Regression_RUN_1:	0.14541730244445195
1528	DescTree_NoMaxDepth_RUN_9:	0.14396422411218956
1529	KNN_Neighbor5_RUN_3:	0.14381911698579608
1530	RandomForest_MaxTrees50_RUN_1:	0.1423562323360298
1531	RandomForest_MaxTrees100_RUN_4:	0.12434555199491504
1532	RandomForest_MaxTrees150_RUN_5:	0.11220016892992346
1533	RandomForest_MaxTrees150_RUN_3:	0.10011949515628893
1534	KNN_Neighbor3_RUN_9:	0.08956004096611758
1535	DescTree_NoMaxDepth_RUN_8:	0.0871030887650508
1536	DescTree_MaxDepth100_RUN_6:	0.06959824859278929

1537	KNN_Neighbor5_RUN_4:	0.043883290720409085
1538	KNN_Neighbor7_RUN_3:	0.04285978892772402
1539	SVM_POLY_RUN_1:	0.04026304487048438
1540	KNN_Neighbor3_RUN_4:	0.03661622941254372
1541	SVM_RBF_RUN_5:	0.03276904031578354
1542	KNN_Neighbor9_RUN_5:	0.0321489315771899
1543	KNN_Neighbor9_RUN_2:	0.029275847641862862
1544	Lasso_Regression_RUN_10:	0.026770321367914907
1545	SVM_POLY_RUN_9:	0.025248497556617067
1546	SVM_RBF_RUN_4:	0.023596414297642365
1547	KNN_Neighbor9_RUN_6:	0.019588077576374596
1548	SVM_SIGMOID_RUN_7:	0.006090283565781118
1549	SVM_SIGMOID_RUN_4:	0.0010805835116697304
1550	KNN_Neighbor9_RUN_1:	-0.0005734668826231637
1551	KNN_Neighbor7_RUN_7:	-0.001906248956345058
1552	SVM_SIGMOID_RUN_8:	-0.008027138482350926
1553	SVM_POLY_RUN_6:	-0.014603876869037524
1554	Lasso_Regression_RUN_4:	-0.015374905207642398
1555	SVM_RBF_RUN_9:	-0.019531378676391764
1556	SVM_RBF_RUN_8:	-0.02246676089679478
1557	DescTree_MaxDepth100_RUN_10:	-0.04082700421940921
1558	SVM_POLY_RUN_7:	-0.04131583201605227
1559	SVM_POLY_RUN_10:	-0.04638128852361745
1560	SVM_SIGMOID_RUN_10:	-0.05448778631826623
1561	Linear_Regression_RUN_3:	-0.05621094717163122
1562	SVM_RBF_RUN_2:	-0.06437206497538361
1563	RandomForest_MaxTrees50_RUN_6:	-0.06568073448857503
1564	SVM_SIGMOID_RUN_1:	-0.07586742576953598
1565	SVM_POLY_RUN_4:	-0.07795109819613644
1566	SVM_POLY_RUN_8:	-0.08036816325905871
1567	KNN_Neighbor9_RUN_9:	-0.08308780881915223
1568	SVM_SIGMOID_RUN_3:	-0.08566641813425901
1569	KNN_Neighbor5_RUN_2:	-0.08609697083187551
1570	DescTree_MaxDepth500_RUN_1:	-0.08894568556200344
1571	DescTree_NoMaxDepth_RUN_7:	-0.0999255603494229
1572	DescTree_NoMaxDepth_RUN_6:	-0.10781850958225458
1573	RandomForest_MaxTrees100_RUN_3:	-0. 11361992018374512
1574	KNN_Neighbor9_RUN_10:	-0.11667114983600091
1575	SVM_POLY_RUN_3:	-0.11782047703413423
1576	KNN_Neighbor5_RUN_9:	-0.12663551388929273

1577	Linear_Regression_RUN_9:	-0.1275335976954659
1578	RandomForest_MaxTrees50_RUN_4:	-0.13245860338604087
1579	SVM_RBF_RUN_7:	-0.13520202384992275
1580	KNN_Neighbor1_RUN_7:	-0.13596915920834718
1581	RandomForest_MaxTrees100_RUN_7:	-0. 13713736353574513
1582	SVM_SIGMOID_RUN_5:	-0.13753601339825816
1583	RandomForest_MaxTrees150_RUN_10:	-0. 1560542605477213
1584	RandomForest_MaxTrees100_RUN_5:	-0. 16981810709407252
1585	SVM_RBF_RUN_10:	-0.178726235504169
1586	KNN_Neighbor7_RUN_6:	-0.18978498463030924
1587	RandomForest_MaxTrees150_RUN_8:	-0. 19476320075522113
1588	DescTree_MaxDepth100_RUN_5:	-0.2436904569516325
1589	SVM_LINEAR_RUN_4:	-0.26036201591478325
1590	KNN_Neighbor3_RUN_10:	-0.27624219536430417
1591	DescTree_MaxDepth1000_RUN_4:	-0.2786845952877448
1592	KNN_Neighbor3_RUN_1:	-0.3018034729389121
1593	KNN_Neighbor3_RUN_6:	-0.30349873013547946
1594	DescTree_MaxDepth1000_RUN_2:	-0.30686074426929677
1595	KNN_Neighbor1_RUN_1:	-0.3107910132811582
1596	SVM_SIGMOID_RUN_6:	-0.357198453223446
1597	KNN_Neighbor5_RUN_1:	-0.35917260998036205
1598	DescTree_MaxDepth100_RUN_8:	-0.36364959521448004
1599	DescTree_MaxDepth1000_RUN_10:	-0.3780662098814722
1600	KNN_Neighbor3_RUN_3:	-0.37945446421264384
1601	KNN_Neighbor7_RUN_9:	-0.381215108657869
1602	KNN_Neighbor1_RUN_3:	-0.3983788090285423
1603	KNN_Neighbor7_RUN_8:	-0.4023535363659838
1604	RandomForest_MaxTrees50_RUN_2:	-0.5042825878657538
1605	DescTree_NoMaxDepth_RUN_10:	-0.5240850527737204
1606	RandomForest_MaxTrees100_RUN_1:	-0.5397653979777519
1607	RandomForest_MaxTrees100_RUN_2:	-0.5661804164122213
1608	DescTree_MaxDepth500_RUN_8:	-0.5714157044295931
1609	RandomForest_MaxTrees50_RUN_8:	-0.5888701501370754
1610	KNN_Neighbor9_RUN_4:	-0.5983871727114678
1611	DescTree_MaxDepth1000_RUN_9:	-0.6240394540658332
1612	Linear_Regression_RUN_5:	-0.6449175046753444
1613	RandomForest_MaxTrees50_RUN_10:	-0.7409775482601746

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1614 SVM_LINEAR_RUN_8: -0.7735667231831047
1615 Lasso_Regression_RUN_3: -0.7768114340717256
1616 DescTree_MaxDepth100_RUN_4: -0.8369252762591928
1617 SVM_SIGMOID_RUN_2: -0.848597658609572
1618 DescTree_MaxDepth500_RUN_4: -0.8544073691136385
1619 SVM_SIGMOID_RUN_9: -0.8828794489164686
1620 Lasso_Regression_RUN_1: -0.8877030705678579
1621 SVM_LINEAR_RUN_3: -0.9049687457370594
1622 DescTree_MaxDepth500_RUN_6: -0.9723833966360613
1623 RandomForest_MaxTrees150_RUN_6: -0.9777753274388763
1624 SVM_POLY_RUN_5: -1.0110198880875148
1625 Lasso_Regression_RUN_6: -1.0248453145704626
1626 Linear_Regression_RUN_2: -1.0534525331204017
1627 DescTree_MaxDepth500_RUN_3: -1.0784596522185201
1628 DescTree_MaxDepth500_RUN_7: -1.1687643001430432
1629 DescTree_MaxDepth1000_RUN_1: -1.1748619313780209
1630 RandomForest_MaxTrees150_RUN_9: -1.1889985979312416
1631 KNN_Neighbor9_RUN_7: -1.2273366538469626
1632 SVM_RBF_RUN_6: -1.2365623438055322
1633 Linear_Regression_RUN_6: -1.287648280149424
1634 DescTree_MaxDepth100_RUN_1: -1.3123561042325145
1635 DescTree_NoMaxDepth_RUN_2: -1.3495787502925345
1636 Linear_Regression_RUN_4: -1.3557101652673875
1637 DescTree_MaxDepth500_RUN_2: -1.3818200226168638
1638 DescTree_MaxDepth500_RUN_5: -1.4255850818067155
1639 KNN_Neighbor1_RUN_10: -1.4469309940937523
1640 KNN_Neighbor5_RUN_10: -1.476512907750998
1641 SVM_RBF_RUN_3: -1.4953076570413146
1642 DescTree_MaxDepth500_RUN_9: -1.5123988232752175
1643 DescTree_MaxDepth1000_RUN_3: -1.5264889343514434
1644 Lasso_Regression_RUN_2: -1.7672291731662009
1645 DescTree_MaxDepth100_RUN_7: -1.8572966048625776
1646 DescTree_MaxDepth1000_RUN_7: -1.8625945078763673
1647 DescTree_MaxDepth1000_RUN_5: -1.8687299023080177
1648 DescTree_NoMaxDepth_RUN_5: -1.9504856337951355
1649 Lasso_Regression_RUN_5: -2.0975417339659135
1650 DescTree_MaxDepth100_RUN_2: -2.186996181045955
1651 KNN_Neighbor7_RUN_10: -2.350943682816639
1652 SVM_RBF_RUN_1: -2.4424520090341986
1653 DescTree_NoMaxDepth_RUN_1: -2.574302626102774
1654 KNN_Neighbor7_RUN_4: -2.6007358127815627
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1655 KNN_Neighbor1_RUN_8: -2.633267046494321
1656 KNN_Neighbor5_RUN_8: -2.6933128249851417
1657 DescTree_MaxDepth100_RUN_3: -3.3274848572897344
1658 DescTree_MaxDepth100_RUN_9: -3.490579079058323
1659 KNN_Neighbor9_RUN_8: -3.585174705910351
1660 SVM_LINEAR_RUN_5: -4.103411273125908
1661 SVM_LINEAR_RUN_7: -4.920854599018966
1662 DescTree_MaxDepth500_RUN_10: -5.033624930678545
1663 SVM_LINEAR_RUN_10: -5.373090176987459
1664 SVM_LINEAR_RUN_2: -48.93716392087793
1665 SVM_POLY_RUN_2: -243.6527898070938
1666
1667 AVG R^2 SCORES GREATEST TO LOWEST:
1668 KNN_Neighbor3: 0.03352249220704514
1669 RandomForest_MaxTrees100: -0.03755289693508185
1670 RandomForest_MaxTrees50: -0.08505934704762247
1671 RandomForest_MaxTrees150: -0.13634892405168011
1672 SVM_SIGMOID: -0.24430894757747063
1673 Linear_Regression: -0.2522368145092888
1674 KNN_Neighbor1: -0.3008019861250427
1675 KNN_Neighbor5: -0.34978975712403937
1676 KNN_Neighbor7: -0.4723508522850043
1677 KNN_Neighbor9: -0.5267395107151776
1678 Lasso_Regression: -0.5272255158234147
1679 SVM_RBF: -0.5538255019170282
1680 DescTree_NoMaxDepth: -0.5722667136274895
1681 DescTree_MaxDepth1000: -0.6921826002662679
1682 DescTree_MaxDepth100: -1.359020691054103
1683 DescTree_MaxDepth500: -1.4087804966480202
1684 SVM_LINEAR: -6.406264878611144
1685 SVM_POLY: -24.497673888865226
1686
1687 Finished at 1335.7525687 seconds
1688
1689 Process finished with exit code 0
1690
```