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1 C:\Users\chris\anaconda3\envs\CreatePokeAI\python.exe
  C:/Users/chris/IdeaProjects/PokemonGame2/PokemonGame
  /src/CreateNewPokeAI/Models/ModelTesting/
  RegressionWeightTests.py
2 81
3 (81, 62500)
4 (81,)
5 Data Loaded at 1.1521762 seconds
6 Creating Models
7 Pipeline Made at 0.00062709999999916 seconds
8
9 Linear_Regression
10 Creating Data for Linear_Regression_RUN_1
11 Model Made at 0.17557969999999967 seconds
12 Finding Best Fits and Testing Model
13 Created Estimates at 0.009155200000000363 seconds
14 R Squared SCORE:
15 -15.849014250669683
16 Run Completed at 0.1853360999999978 seconds.
17
18 Creating Data for Linear_Regression_RUN_2
19 Model Made at 0.443562 seconds
20 Finding Best Fits and Testing Model
21 Created Estimates at 0.001732799999996457 seconds
22 R Squared SCORE:
23 -0.5232104803012878
24 Run Completed at 0.4457779999999998 seconds.
25
26 Creating Data for Linear_Regression_RUN_3
27 Model Made at 0.2789429999999994 seconds
28 Finding Best Fits and Testing Model
29 Created Estimates at 0.001749699999999652 seconds
30 R Squared SCORE:
31 0.1920087830039794
32 Run Completed at 0.2812608999999999 seconds.
33
34 Creating Data for Linear_Regression_RUN_4
35 Model Made at 0.37706839999999975 seconds
36 Finding Best Fits and Testing Model
37 Created Estimates at 0.0013893000000004818 seconds
38 R Squared SCORE:
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39 -0.32662557490148747
40 Run Completed at 0.3790211000000001 seconds.
41
42 Creating Data for Linear_Regression_RUN_5
43 Model Made at 0.26448930000000015 seconds
44 Finding Best Fits and Testing Model
45 Created Estimates at 0.001894799999996412 seconds
46 R Squared SCORE:
47 0.4127845916731836
48 Run Completed at 0.2669579999999998 seconds.
49
50 Creating Data for Linear_Regression_RUN_6
51 Model Made at 0.2651126999999953 seconds
52 Finding Best Fits and Testing Model
53 Created Estimates at 0.001420099999998132 seconds
54 R Squared SCORE:
55 -2.4913573701529677
56 Run Completed at 0.2670607000000004 seconds.
57
58 Creating Data for Linear_Regression_RUN_7
59 Model Made at 0.21764540000000032 seconds
60 Finding Best Fits and Testing Model
61 Created Estimates at 0.001512799999995367 seconds
62 R Squared SCORE:
63 -2.856521569400413
64 Run Completed at 0.21973610000000043 seconds.
65
66 Creating Data for Linear_Regression_RUN_8
67 Model Made at 0.3678591999999983 seconds
68 Finding Best Fits and Testing Model
69 Created Estimates at 0.00134189999999896 seconds
70 R Squared SCORE:
71 -0.3167905311165913
72 Run Completed at 0.3696111999999996 seconds.
73
74 Creating Data for Linear_Regression_RUN_9
75 Model Made at 0.23742519999999967 seconds
76 Finding Best Fits and Testing Model
77 Created Estimates at 0.001724400000005144 seconds
78 R Squared SCORE:
79 0.0771977571067739
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80 Run Completed at 0.2396304999999964 seconds.  
81  
82 Creating Data for Linear_Regression_RUN_10  
83 Model Made at 0.2191261999999983 seconds  
84 Finding Best Fits and Testing Model  
85 Created Estimates at 0.0014633000000001672 seconds  
86 R Squared SCORE:  
87 -0.14632647395717568  
88 Run Completed at 0.22104560000000006 seconds.  
89  
90 Linear_Regression all runs completed at 2.  
876337699999997 seconds.  
91 Lasso_Regression  
92 Creating Data for Lasso_Regression_RUN_1  
93 Model Made at 1.3390412000000005 seconds  
94 Finding Best Fits and Testing Model  
95 Created Estimates at 0.0014212999999996256 seconds  
96 R Squared SCORE:  
97 -0.30377309286984167  
98 Run Completed at 1.3410583000000003 seconds.  
99  
100 Creating Data for Lasso_Regression_RUN_2  
101 Model Made at 4.2502184 seconds  
102 Finding Best Fits and Testing Model  
103 Created Estimates at 0.002218900000000801 seconds  
104 R Squared SCORE:  
105 -2.4041173384407513  
106 Run Completed at 4.2529088 seconds.  
107  
108 Creating Data for Lasso_Regression_RUN_3  
109 Model Made at 1.728571399999999 seconds  
110 Finding Best Fits and Testing Model  
111 Created Estimates at 0.0014019000000011772 seconds  
112 R Squared SCORE:  
113 -0.192139381694044  
114 Run Completed at 1.7304030000000008 seconds.  
115  
116 Creating Data for Lasso_Regression_RUN_4  
117 Model Made at 2.5210420000000013 seconds  
118 Finding Best Fits and Testing Model  
119 Created Estimates at 0.0014741999999987598 seconds
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120 R Squared SCORE:  
121 -0.12166625433226619  
122 Run Completed at 2.5230365000000017 seconds.  
123  
124 Creating Data for Lasso_Regression_RUN_5  
125 Model Made at 3.711071699999998 seconds  
126 Finding Best Fits and Testing Model  
127 Created Estimates at 0.001211800000000961 seconds  
128 R Squared SCORE:  
129 -0.4869633515086398  
130 Run Completed at 3.712657300000002 seconds.  
131  
132 Creating Data for Lasso_Regression_RUN_6  
133 Model Made at 1.7875510000000006 seconds  
134 Finding Best Fits and Testing Model  
135 Created Estimates at 0.00424689999998277 seconds  
136 R Squared SCORE:  
137 0.7993125116158283  
138 Run Completed at 1.7922902 seconds.  
139  
140 Creating Data for Lasso_Regression_RUN_7  
141 Model Made at 2.8175579000000006 seconds  
142 Finding Best Fits and Testing Model  
143 Created Estimates at 0.00134930000001108 seconds  
144 R Squared SCORE:  
145 -11.746946470572293  
146 Run Completed at 2.8193781000000016 seconds.  
147  
148 Creating Data for Lasso_Regression_RUN_8  
149 Model Made at 2.462256400000001 seconds  
150 Finding Best Fits and Testing Model  
151 Created Estimates at 0.001123799999984538 seconds  
152 R Squared SCORE:  
153 -0.4636350440073569  
154 Run Completed at 2.4637233000000016 seconds.  
155  
156 Creating Data for Lasso_Regression_RUN_9  
157 Model Made at 3.9973313000000026 seconds  
158 Finding Best Fits and Testing Model  
159 Created Estimates at 0.001008599999986939 seconds  
160 R Squared SCORE:
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161 -0.17386235549955242
162 Run Completed at 3.998623399999996 seconds.
163
164 Creating Data for Lasso_Regression_RUN_10
165 Model Made at 4.014337599999975 seconds
166 Finding Best Fits and Testing Model
167 Created Estimates at 0.0016162000000008447 seconds
168 R Squared SCORE:
169 -0.8975002566982191
170 Run Completed at 4.016344400000001 seconds.
171
172 Lasso_Regression all runs completed at 28.
      651156800000003 seconds.
173 SVM_RBF
174 Creating Data for SVM_RBF_RUN_1
175 Model Made at 0.2444492999999943 seconds
176 Finding Best Fits and Testing Model
177 Created Estimates at 0.044342100000001494 seconds
178 R Squared SCORE:
179 -0.3117099901080511
180 Run Completed at 0.289269099999985 seconds.
181
182 Creating Data for SVM_RBF_RUN_2
183 Model Made at 0.2572878000000003 seconds
184 Finding Best Fits and Testing Model
185 Created Estimates at 0.052967700000003504 seconds
186 R Squared SCORE:
187 0.005650786327318191
188 Run Completed at 0.31079030000000074 seconds.
189
190 Creating Data for SVM_RBF_RUN_3
191 Model Made at 0.2227218000000022 seconds
192 Finding Best Fits and Testing Model
193 Created Estimates at 0.07178340000000105 seconds
194 R Squared SCORE:
195 -0.10320539098736714
196 Run Completed at 0.2950355999999985 seconds.
197
198 Creating Data for SVM_RBF_RUN_4
199 Model Made at 0.24643209999999982 seconds
200 Finding Best Fits and Testing Model
```

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201 Created Estimates at 0.0519305000000454 seconds
202 R Squared SCORE:
203 -0.2852513120190676
204 Run Completed at 0.2989257999999924 seconds.
205
206 Creating Data for SVM_RBF_RUN_5
207 Model Made at 0.2391104999999534 seconds
208 Finding Best Fits and Testing Model
209 Created Estimates at 0.0779259000000388 seconds
210 R Squared SCORE:
211 0.09031657406669635
212 Run Completed at 0.3177436 seconds.
213
214 Creating Data for SVM_RBF_RUN_6
215 Model Made at 0.2760522000000023 seconds
216 Finding Best Fits and Testing Model
217 Created Estimates at 0.0498767999999983 seconds
218 R Squared SCORE:
219 -0.1989075938255127
220 Run Completed at 0.3264018000000064 seconds.
221
222 Creating Data for SVM_RBF_RUN_7
223 Model Made at 0.23408810000000102 seconds
224 Finding Best Fits and Testing Model
225 Created Estimates at 0.06659220000000232 seconds
226 R Squared SCORE:
227 -0.04587220344947318
228 Run Completed at 0.3012081999999978 seconds.
229
230 Creating Data for SVM_RBF_RUN_8
231 Model Made at 0.2534624999999977 seconds
232 Finding Best Fits and Testing Model
233 Created Estimates at 0.0665791999999962 seconds
234 R Squared SCORE:
235 0.0556638908399031
236 Run Completed at 0.3206018999999998 seconds.
237
238 Creating Data for SVM_RBF_RUN_9
239 Model Made at 0.26706149999999695 seconds
240 Finding Best Fits and Testing Model
241 Created Estimates at 0.06386350000000363 seconds
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242 R Squared SCORE:  
243 -0.03706777329336641  
244 Run Completed at 0.3314512000000036 seconds.  
245  
246 Creating Data for SVM_RBF_RUN_10  
247 Model Made at 0.25877129999999937 seconds  
248 Finding Best Fits and Testing Model  
249 Created Estimates at 0.07106580000000662 seconds  
250 R Squared SCORE:  
251 -0.4262316794086567  
252 Run Completed at 0.33036510000000163 seconds.  
253  
254 SVM_RBF all runs completed at 3.1225345000000004  
seconds.  
255 SVM_LINEAR  
256 Creating Data for SVM_LINEAR_RUN_1  
257 Model Made at 0.2647007999999996 seconds  
258 Finding Best Fits and Testing Model  
259 Created Estimates at 0.0436862999999974 seconds  
260 R Squared SCORE:  
261 0.6270490830397577  
262 Run Completed at 0.3089940999999996 seconds.  
263  
264 Creating Data for SVM_LINEAR_RUN_2  
265 Model Made at 0.26791180000000026 seconds  
266 Finding Best Fits and Testing Model  
267 Created Estimates at 0.018259100000001638 seconds  
268 R Squared SCORE:  
269 0.318170836587755  
270 Run Completed at 0.286728200000006 seconds.  
271  
272 Creating Data for SVM_LINEAR_RUN_3  
273 Model Made at 0.2903425000000013 seconds  
274 Finding Best Fits and Testing Model  
275 Created Estimates at 0.01631479999999641 seconds  
276 R Squared SCORE:  
277 -72.67041642787733  
278 Run Completed at 0.3072063999999983 seconds.  
279  
280 Creating Data for SVM_LINEAR_RUN_4  
281 Model Made at 0.33454799999999807 seconds
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282 Finding Best Fits and Testing Model
283 Created Estimates at 0.015979600000001426 seconds
284 R Squared SCORE:
285 -4.226657259378865
286 Run Completed at 0.3510745999999969 seconds.
287
288 Creating Data for SVM_LINEAR_RUN_5
289 Model Made at 0.2977117000000007 seconds
290 Finding Best Fits and Testing Model
291 Created Estimates at 0.01688580000000428 seconds
292 R Squared SCORE:
293 0.02794108753516522
294 Run Completed at 0.31512720000000627 seconds.
295
296 Creating Data for SVM_LINEAR_RUN_6
297 Model Made at 0.29862780000000555 seconds
298 Finding Best Fits and Testing Model
299 Created Estimates at 0.01337609999995006 seconds
300 R Squared SCORE:
301 0.11223126873280431
302 Run Completed at 0.3125883000000016 seconds.
303
304 Creating Data for SVM_LINEAR_RUN_7
305 Model Made at 0.286269099999984 seconds
306 Finding Best Fits and Testing Model
307 Created Estimates at 0.0155123999999865 seconds
308 R Squared SCORE:
309 0.16748262025348892
310 Run Completed at 0.3024284999999777 seconds.
311
312 Creating Data for SVM_LINEAR_RUN_8
313 Model Made at 0.289788799999966 seconds
314 Finding Best Fits and Testing Model
315 Created Estimates at 0.01678350000002505 seconds
316 R Squared SCORE:
317 -0.4487607708606549
318 Run Completed at 0.30715550000000036 seconds.
319
320 Creating Data for SVM_LINEAR_RUN_9
321 Model Made at 0.3211792000000031 seconds
322 Finding Best Fits and Testing Model
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323 Created Estimates at 0.0140995999999439 seconds
324 R Squared SCORE:
325 -7.2326563921261435
326 Run Completed at 0.335751700000003 seconds.
327
328 Creating Data for SVM_LINEAR_RUN_10
329 Model Made at 0.2861006999999865 seconds
330 Finding Best Fits and Testing Model
331 Created Estimates at 0.0171415000000103 seconds
332 R Squared SCORE:
333 0.19140456321126076
334 Run Completed at 0.303845799999977 seconds.
335
336 SVM_LINEAR all runs completed at 3.131716099999984
seconds.
337 SVM_POLY
338 Creating Data for SVM_POLY_RUN_1
339 Model Made at 0.264109699999988 seconds
340 Finding Best Fits and Testing Model
341 Created Estimates at 0.01721470000003802 seconds
342 R Squared SCORE:
343 -0.03161867653422101
344 Run Completed at 0.281996599999994 seconds.
345
346 Creating Data for SVM_POLY_RUN_2
347 Model Made at 0.294239199999998 seconds
348 Finding Best Fits and Testing Model
349 Created Estimates at 0.0168375000000117 seconds
350 R Squared SCORE:
351 -0.5994498568695761
352 Run Completed at 0.311590299999989 seconds.
353
354 Creating Data for SVM_POLY_RUN_3
355 Model Made at 0.272146700000004 seconds
356 Finding Best Fits and Testing Model
357 Created Estimates at 0.0168218000000244 seconds
358 R Squared SCORE:
359 -0.29575211799326917
360 Run Completed at 0.2894391000000027 seconds.
361
362 Creating Data for SVM_POLY_RUN_4
```

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363 Model Made at 0.2684690999999724 seconds
364 Finding Best Fits and Testing Model
365 Created Estimates at 0.01641470000005666 seconds
366 R Squared SCORE:
367 -0.1151907206491436
368 Run Completed at 0.2853750000000193 seconds.
369
370 Creating Data for SVM_POLY_RUN_5
371 Model Made at 0.302378599999973 seconds
372 Finding Best Fits and Testing Model
373 Created Estimates at 0.01801130000004837 seconds
374 R Squared SCORE:
375 -0.07356051396750951
376 Run Completed at 0.320888699999976 seconds.
377
378 Creating Data for SVM_POLY_RUN_6
379 Model Made at 0.2707607000000385 seconds
380 Finding Best Fits and Testing Model
381 Created Estimates at 0.01682759999999165 seconds
382 R Squared SCORE:
383 -0.19648729298989975
384 Run Completed at 0.28815810000000397 seconds.
385
386 Creating Data for SVM_POLY_RUN_7
387 Model Made at 0.26904409999995 seconds
388 Finding Best Fits and Testing Model
389 Created Estimates at 0.0201828000000061 seconds
390 R Squared SCORE:
391 0.18409950767031147
392 Run Completed at 0.2898331999999968 seconds.
393
394 Creating Data for SVM_POLY_RUN_8
395 Model Made at 0.2473923000000134 seconds
396 Finding Best Fits and Testing Model
397 Created Estimates at 0.02033759999997735 seconds
398 R Squared SCORE:
399 -0.49655114762366837
400 Run Completed at 0.268234800000019 seconds.
401
402 Creating Data for SVM_POLY_RUN_9
403 Model Made at 0.2370815000000217 seconds
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404 Finding Best Fits and Testing Model
405 Created Estimates at 0.014486599999997907 seconds
406 R Squared SCORE:
407 -0.12181090555393337
408 Run Completed at 0.25204800000000205 seconds.
409
410 Creating Data for SVM_POLY_RUN_10
411 Model Made at 0.2813324999999776 seconds
412 Finding Best Fits and Testing Model
413 Created Estimates at 0.021594100000001504 seconds
414 R Squared SCORE:
415 -39.77396333418999
416 Run Completed at 0.3034123999999914 seconds.
417
418 SVM_POLY all runs completed at 2.8918145999999965
seconds.
419 SVM_SIGMOID
420 Creating Data for SVM_SIGMOID_RUN_1
421 Model Made at 0.301978400000003 seconds
422 Finding Best Fits and Testing Model
423 Created Estimates at 0.022703100000001086 seconds
424 R Squared SCORE:
425 -0.04003697475472179
426 Run Completed at 0.32523880000000105 seconds.
427
428 Creating Data for SVM_SIGMOID_RUN_2
429 Model Made at 0.2793008999999955 seconds
430 Finding Best Fits and Testing Model
431 Created Estimates at 0.016788200000000586 seconds
432 R Squared SCORE:
433 -0.1771439358534368
434 Run Completed at 0.2965477999999903 seconds.
435
436 Creating Data for SVM_SIGMOID_RUN_3
437 Model Made at 0.2762411 seconds
438 Finding Best Fits and Testing Model
439 Created Estimates at 0.019546999999995762 seconds
440 R Squared SCORE:
441 -0.06718413281628477
442 Run Completed at 0.2962778999999976 seconds.
443
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```
444 Creating Data for SVM_SIGMOID_RUN_4
445 Model Made at 0.2756319000000005 seconds
446 Finding Best Fits and Testing Model
447 Created Estimates at 0.01941809999995775 seconds
448 R Squared SCORE:
449 -0.21099918197403777
450 Run Completed at 0.2955406999999655 seconds.
451
452 Creating Data for SVM_SIGMOID_RUN_5
453 Model Made at 0.31457120000000316 seconds
454 Finding Best Fits and Testing Model
455 Created Estimates at 0.02193580000001393 seconds
456 R Squared SCORE:
457 -0.419449579370724
458 Run Completed at 0.33703730000000576 seconds.
459
460 Creating Data for SVM_SIGMOID_RUN_6
461 Model Made at 0.2977159000000003 seconds
462 Finding Best Fits and Testing Model
463 Created Estimates at 0.0170432999999743 seconds
464 R Squared SCORE:
465 -0.11833116575103975
466 Run Completed at 0.315328999999984 seconds.
467
468 Creating Data for SVM_SIGMOID_RUN_7
469 Model Made at 0.3181569999999936 seconds
470 Finding Best Fits and Testing Model
471 Created Estimates at 0.01852609999995438 seconds
472 R Squared SCORE:
473 -0.08855568352595689
474 Run Completed at 0.3373074000000026 seconds.
475
476 Creating Data for SVM_SIGMOID_RUN_8
477 Model Made at 0.2718679999999978 seconds
478 Finding Best Fits and Testing Model
479 Created Estimates at 0.01744200000002622 seconds
480 R Squared SCORE:
481 0.10014188317010098
482 Run Completed at 0.289784199999997 seconds.
483
484 Creating Data for SVM_SIGMOID_RUN_9
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485 Model Made at 0.28614160000000055 seconds
486 Finding Best Fits and Testing Model
487 Created Estimates at 0.01749650000000026 seconds
488 R Squared SCORE:
489 -0.051210528132604294
490 Run Completed at 0.3041509999999974 seconds.
491
492 Creating Data for SVM_SIGMOID_RUN_10
493 Model Made at 0.27636770000000155 seconds
494 Finding Best Fits and Testing Model
495 Created Estimates at 0.016336199999997802 seconds
496 R Squared SCORE:
497 -0.2203324288456321
498 Run Completed at 0.2931863000000021 seconds.
499
500 SVM_SIGMOID all runs completed at 3.091202899999999
seconds.
501 KNN_Neighbor1
502 Creating Data for KNN_Neighbor1_RUN_1
503 Model Made at 0.08662250000000427 seconds
504 Finding Best Fits and Testing Model
505 Created Estimates at 0.023656299999998964 seconds
506 R Squared SCORE:
507 0.8225284603493205
508 Run Completed at 0.11066540000000202 seconds.
509
510 Creating Data for KNN_Neighbor1_RUN_2
511 Model Made at 0.10369139999999533 seconds
512 Finding Best Fits and Testing Model
513 Created Estimates at 0.0183633000000043 seconds
514 R Squared SCORE:
515 -0.43184554052997726
516 Run Completed at 0.12247769999999747 seconds.
517
518 Creating Data for KNN_Neighbor1_RUN_3
519 Model Made at 0.09951399999999921 seconds
520 Finding Best Fits and Testing Model
521 Created Estimates at 0.016362699999994845 seconds
522 R Squared SCORE:
523 -0.4018303759383075
524 Run Completed at 0.11625229999999931 seconds.
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525
526 Creating Data for KNN_Neighbor1_RUN_4
527 Model Made at 0.0956715999999575 seconds
528 Finding Best Fits and Testing Model
529 Created Estimates at 0.02822400000000158 seconds
530 R Squared SCORE:
531 -1.1896165698638685
532 Run Completed at 0.1243942999999874 seconds.
533
534 Creating Data for KNN_Neighbor1_RUN_5
535 Model Made at 0.102634899999982 seconds
536 Finding Best Fits and Testing Model
537 Created Estimates at 0.01790090000000775 seconds
538 R Squared SCORE:
539 0.724589843833128
540 Run Completed at 0.120954499999963 seconds.
541
542 Creating Data for KNN_Neighbor1_RUN_6
543 Model Made at 0.0912115 seconds
544 Finding Best Fits and Testing Model
545 Created Estimates at 0.0224131999999547 seconds
546 R Squared SCORE:
547 0.1604296308385823
548 Run Completed at 0.1141177000000132 seconds.
549
550 Creating Data for KNN_Neighbor1_RUN_7
551 Model Made at 0.09954220000000191 seconds
552 Finding Best Fits and Testing Model
553 Created Estimates at 0.02064080000002457 seconds
554 R Squared SCORE:
555 -1.0758480993245878
556 Run Completed at 0.1213583999999831 seconds.
557
558 Creating Data for KNN_Neighbor1_RUN_8
559 Model Made at 0.10992850000000232 seconds
560 Finding Best Fits and Testing Model
561 Created Estimates at 0.01758979999996103 seconds
562 R Squared SCORE:
563 0.2321649236433505
564 Run Completed at 0.1279807000000195 seconds.
565
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```
566 Creating Data for KNN_Neighbor1_RUN_9
567 Model Made at 0.0918956000000085 seconds
568 Finding Best Fits and Testing Model
569 Created Estimates at 0.0177750000000032 seconds
570 R Squared SCORE:
571 -0.23649388149319606
572 Run Completed at 0.11004960000000352 seconds.
573
574 Creating Data for KNN_Neighbor1_RUN_10
575 Model Made at 0.1197208999999724 seconds
576 Finding Best Fits and Testing Model
577 Created Estimates at 0.01804280000003467 seconds
578 R Squared SCORE:
579 -0.4029296355613563
580 Run Completed at 0.138247599999997 seconds.
581
582 KNN_Neighbor1 all runs completed at 1.
      2072281000000018 seconds.
583 KNN_Neighbor3
584 Creating Data for KNN_Neighbor3_RUN_1
585 Model Made at 0.0930065999999539 seconds
586 Finding Best Fits and Testing Model
587 Created Estimates at 0.0166930000000362 seconds
588 R Squared SCORE:
589 -0.2039694564925889
590 Run Completed at 0.1101865999999869 seconds.
591
592 Creating Data for KNN_Neighbor3_RUN_2
593 Model Made at 0.10008350000000377 seconds
594 Finding Best Fits and Testing Model
595 Created Estimates at 0.01991639999999612 seconds
596 R Squared SCORE:
597 -0.06176610236235458
598 Run Completed at 0.12048030000000409 seconds.
599
600 Creating Data for KNN_Neighbor3_RUN_3
601 Model Made at 0.10957799999999907 seconds
602 Finding Best Fits and Testing Model
603 Created Estimates at 0.01774209999999954 seconds
604 R Squared SCORE:
605 -0.14546936695476997
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606 Run Completed at 0.1279105999999987 seconds.  
607  
608 Creating Data for KNN_Neighbor3_RUN_4  
609 Model Made at 0.0952768000000006 seconds  
610 Finding Best Fits and Testing Model  
611 Created Estimates at 0.01943639999996468 seconds  
612 R Squared SCORE:  
613 0.8692979144959179  
614 Run Completed at 0.11511319999999614 seconds.  
615  
616 Creating Data for KNN_Neighbor3_RUN_5  
617 Model Made at 0.1045411999999989 seconds  
618 Finding Best Fits and Testing Model  
619 Created Estimates at 0.01903719999999643 seconds  
620 R Squared SCORE:  
621 -4.645363886626538  
622 Run Completed at 0.12398890000000051 seconds.  
623  
624 Creating Data for KNN_Neighbor3_RUN_6  
625 Model Made at 0.09474070000000268 seconds  
626 Finding Best Fits and Testing Model  
627 Created Estimates at 0.01713380000000342 seconds  
628 R Squared SCORE:  
629 0.014864410860958133  
630 Run Completed at 0.1122679000000062 seconds.  
631  
632 Creating Data for KNN_Neighbor3_RUN_7  
633 Model Made at 0.0967312999999475 seconds  
634 Finding Best Fits and Testing Model  
635 Created Estimates at 0.01652280000004167 seconds  
636 R Squared SCORE:  
637 0.21138589144091335  
638 Run Completed at 0.113757499999984 seconds.  
639  
640 Creating Data for KNN_Neighbor3_RUN_8  
641 Model Made at 0.1154315999999375 seconds  
642 Finding Best Fits and Testing Model  
643 Created Estimates at 0.02321230000004404 seconds  
644 R Squared SCORE:  
645 -0.005499932892321313  
646 Run Completed at 0.1391076999999673 seconds.
```

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647
648 Creating Data for KNN_Neighbor3_RUN_9
649 Model Made at 0.1011865000000429 seconds
650 Finding Best Fits and Testing Model
651 Created Estimates at 0.0152067000000024 seconds
652 R Squared SCORE:
653 0.416967422728114
654 Run Completed at 0.1167829000000402 seconds.
655
656 Creating Data for KNN_Neighbor3_RUN_10
657 Model Made at 0.104678999999973 seconds
658 Finding Best Fits and Testing Model
659 Created Estimates at 0.02278940000000626 seconds
660 R Squared SCORE:
661 -1.351697703573878
662 Run Completed at 0.127872099999976 seconds.
663
664 KNN_Neighbor3 all runs completed at 1.
208257799999984 seconds.
665 KNN_Neighbor5
666 Creating Data for KNN_Neighbor5_RUN_1
667 Model Made at 0.105174299999945 seconds
668 Finding Best Fits and Testing Model
669 Created Estimates at 0.01701040000003756 seconds
670 R Squared SCORE:
671 -0.17171761808564723
672 Run Completed at 0.1226114999999787 seconds.
673
674 Creating Data for KNN_Neighbor5_RUN_2
675 Model Made at 0.0956356999999544 seconds
676 Finding Best Fits and Testing Model
677 Created Estimates at 0.01636950000003256 seconds
678 R Squared SCORE:
679 0.18061550832344642
680 Run Completed at 0.1123931999999964 seconds.
681
682 Creating Data for KNN_Neighbor5_RUN_3
683 Model Made at 0.1057717999999942 seconds
684 Finding Best Fits and Testing Model
685 Created Estimates at 0.021641500000012 seconds
686 R Squared SCORE:
```

```
687 -0.32491463337198656
688 Run Completed at 0.1278198000000046 seconds.
689
690 Creating Data for KNN_Neighbor5_RUN_4
691 Model Made at 0.10124410000000239 seconds
692 Finding Best Fits and Testing Model
693 Created Estimates at 0.016984199999996008 seconds
694 R Squared SCORE:
695 -0.4457411738583814
696 Run Completed at 0.1186047999999995 seconds.
697
698 Creating Data for KNN_Neighbor5_RUN_5
699 Model Made at 0.10135600000000267 seconds
700 Finding Best Fits and Testing Model
701 Created Estimates at 0.0161404999999878 seconds
702 R Squared SCORE:
703 0.49724368567891664
704 Run Completed at 0.11787770000000108 seconds.
705
706 Creating Data for KNN_Neighbor5_RUN_6
707 Model Made at 0.1159670999999888 seconds
708 Finding Best Fits and Testing Model
709 Created Estimates at 0.0174848999999947 seconds
710 R Squared SCORE:
711 0.027754800719210215
712 Run Completed at 0.1338391999999705 seconds.
713
714 Creating Data for KNN_Neighbor5_RUN_7
715 Model Made at 0.0943477000000015 seconds
716 Finding Best Fits and Testing Model
717 Created Estimates at 0.01624589999999415 seconds
718 R Squared SCORE:
719 -0.8560235592077987
720 Run Completed at 0.1109808000000001 seconds.
721
722 Creating Data for KNN_Neighbor5_RUN_8
723 Model Made at 0.1068585000000013 seconds
724 Finding Best Fits and Testing Model
725 Created Estimates at 0.02534789999999868 seconds
726 R Squared SCORE:
727 0.41681853718478834
```

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728 Run Completed at 0.13277300000000025 seconds.  
729  
730 Creating Data for KNN_Neighbor5_RUN_9  
731 Model Made at 0.1078544000000008 seconds  
732 Finding Best Fits and Testing Model  
733 Created Estimates at 0.017102199999996515 seconds  
734 R Squared SCORE:  
735 0.3608191128773506  
736 Run Completed at 0.1254431999999942 seconds.  
737  
738 Creating Data for KNN_Neighbor5_RUN_10  
739 Model Made at 0.1056390999999765 seconds  
740 Finding Best Fits and Testing Model  
741 Created Estimates at 0.01686090000000462 seconds  
742 R Squared SCORE:  
743 -0.09810635714122973  
744 Run Completed at 0.12288120000000191 seconds.  
745  
746 KNN_Neighbor5 all runs completed at 1.  
    2258973000000069 seconds.  
747 KNN_Neighbor7  
748 Creating Data for KNN_Neighbor7_RUN_1  
749 Model Made at 0.11470380000000091 seconds  
750 Finding Best Fits and Testing Model  
751 Created Estimates at 0.019660399999999356 seconds  
752 R Squared SCORE:  
753 0.38824236564181225  
754 Run Completed at 0.1348405000000028 seconds.  
755  
756 Creating Data for KNN_Neighbor7_RUN_2  
757 Model Made at 0.10893170000000651 seconds  
758 Finding Best Fits and Testing Model  
759 Created Estimates at 0.01587959999998106 seconds  
760 R Squared SCORE:  
761 0.08457970103627921  
762 Run Completed at 0.1251973000000035 seconds.  
763  
764 Creating Data for KNN_Neighbor7_RUN_3  
765 Model Made at 0.1127613000000025 seconds  
766 Finding Best Fits and Testing Model  
767 Created Estimates at 0.01981940000000293 seconds
```

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768 R Squared SCORE:  
769 -0.0011146931481091915  
770 Run Completed at 0.13297470000000544 seconds.  
771  
772 Creating Data for KNN_Neighbor7_RUN_4  
773 Model Made at 0.11231390000000374 seconds  
774 Finding Best Fits and Testing Model  
775 Created Estimates at 0.018092699999996853 seconds  
776 R Squared SCORE:  
777 -0.12159934759252145  
778 Run Completed at 0.13084500000000077 seconds.  
779  
780 Creating Data for KNN_Neighbor7_RUN_5  
781 Model Made at 0.09807639999999651 seconds  
782 Finding Best Fits and Testing Model  
783 Created Estimates at 0.01599029999999857 seconds  
784 R Squared SCORE:  
785 -0.37236381996031587  
786 Run Completed at 0.1144539999999495 seconds.  
787  
788 Creating Data for KNN_Neighbor7_RUN_6  
789 Model Made at 0.12092719999999701 seconds  
790 Finding Best Fits and Testing Model  
791 Created Estimates at 0.01864020000000107 seconds  
792 R Squared SCORE:  
793 0.002441146147452833  
794 Run Completed at 0.1399796999999782 seconds.  
795  
796 Creating Data for KNN_Neighbor7_RUN_7  
797 Model Made at 0.10615950000000396 seconds  
798 Finding Best Fits and Testing Model  
799 Created Estimates at 0.01648920000002313 seconds  
800 R Squared SCORE:  
801 0.46884575069346346  
802 Run Completed at 0.12310530000000597 seconds.  
803  
804 Creating Data for KNN_Neighbor7_RUN_8  
805 Model Made at 0.10356190000000254 seconds  
806 Finding Best Fits and Testing Model  
807 Created Estimates at 0.01898899999997702 seconds  
808 R Squared SCORE:
```

```
809 -0.438340374845567
810 Run Completed at 0.12293790000000371 seconds.
811
812 Creating Data for KNN_Neighbor7_RUN_9
813 Model Made at 0.10342219999999713 seconds
814 Finding Best Fits and Testing Model
815 Created Estimates at 0.016615700000002676 seconds
816 R Squared SCORE:
817 -0.2314563530523388
818 Run Completed at 0.1203606999999991 seconds.
819
820 Creating Data for KNN_Neighbor7_RUN_10
821 Model Made at 0.10271290000000022 seconds
822 Finding Best Fits and Testing Model
823 Created Estimates at 0.019234500000003152 seconds
824 R Squared SCORE:
825 -0.42915390398076037
826 Run Completed at 0.12247920000000079 seconds.
827
828 KNN_Neighbor7 all runs completed at 1.
     2678814000000003 seconds.
829 KNN_Neighbor9
830 Creating Data for KNN_Neighbor9_RUN_1
831 Model Made at 0.10111309999999918 seconds
832 Finding Best Fits and Testing Model
833 Created Estimates at 0.01782659999999936 seconds
834 R Squared SCORE:
835 0.1320145503711142
836 Run Completed at 0.11933140000000009 seconds.
837
838 Creating Data for KNN_Neighbor9_RUN_2
839 Model Made at 0.09945760000000092 seconds
840 Finding Best Fits and Testing Model
841 Created Estimates at 0.019386400000001913 seconds
842 R Squared SCORE:
843 -0.014541416058708734
844 Run Completed at 0.11927260000000217 seconds.
845
846 Creating Data for KNN_Neighbor9_RUN_3
847 Model Made at 0.10494959999999764 seconds
848 Finding Best Fits and Testing Model
```

```
849 Created Estimates at 0.017830400000001134 seconds
850 R Squared SCORE:
851 -0.2712206371270498
852 Run Completed at 0.1232198999999516 seconds.
853
854 Creating Data for KNN_Neighbor9_RUN_4
855 Model Made at 0.1071755999999793 seconds
856 Finding Best Fits and Testing Model
857 Created Estimates at 0.017045400000000654 seconds
858 R Squared SCORE:
859 0.5643522861894917
860 Run Completed at 0.1246766999999487 seconds.
861
862 Creating Data for KNN_Neighbor9_RUN_5
863 Model Made at 0.1104217000000034 seconds
864 Finding Best Fits and Testing Model
865 Created Estimates at 0.01686339999998308 seconds
866 R Squared SCORE:
867 -0.012208311679628991
868 Run Completed at 0.12766630000000134 seconds.
869
870 Creating Data for KNN_Neighbor9_RUN_6
871 Model Made at 0.1166792000000001 seconds
872 Finding Best Fits and Testing Model
873 Created Estimates at 0.017871100000000695 seconds
874 R Squared SCORE:
875 -0.7951571295949154
876 Run Completed at 0.1350116999999973 seconds.
877
878 Creating Data for KNN_Neighbor9_RUN_7
879 Model Made at 0.0988005999999702 seconds
880 Finding Best Fits and Testing Model
881 Created Estimates at 0.01520469999998184 seconds
882 R Squared SCORE:
883 -0.8907045775201934
884 Run Completed at 0.1144897000000003 seconds.
885
886 Creating Data for KNN_Neighbor9_RUN_8
887 Model Made at 0.10561280000000295 seconds
888 Finding Best Fits and Testing Model
889 Created Estimates at 0.0222841000000025 seconds
```

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890 R Squared SCORE:  
891 0.11145881597808693  
892 Run Completed at 0.1283485000000013 seconds.  
893  
894 Creating Data for KNN_Neighbor9_RUN_9  
895 Model Made at 0.10227770000000191 seconds  
896 Finding Best Fits and Testing Model  
897 Created Estimates at 0.015437800000000834 seconds  
898 R Squared SCORE:  
899 0.07270588222175  
900 Run Completed at 0.11814100000000138 seconds.  
901  
902 Creating Data for KNN_Neighbor9_RUN_10  
903 Model Made at 0.0962001999999984 seconds  
904 Finding Best Fits and Testing Model  
905 Created Estimates at 0.01837150000000065 seconds  
906 R Squared SCORE:  
907 0.0390347809098871  
908 Run Completed at 0.1149658999999429 seconds.  
909  
910 KNN_Neighbor9 all runs completed at 1.  
2259057999999996 seconds.  
911 DescTree_NoMaxDepth  
912 Creating Data for DescTree_NoMaxDepth_RUN_1  
913 Model Made at 1.020396500000004 seconds  
914 Finding Best Fits and Testing Model  
915 Created Estimates at 0.001605099999990267 seconds  
916 R Squared SCORE:  
917 -0.00019573635454306348  
918 Run Completed at 1.022388300000003 seconds.  
919  
920 Creating Data for DescTree_NoMaxDepth_RUN_2  
921 Model Made at 0.9555481000000015 seconds  
922 Finding Best Fits and Testing Model  
923 Created Estimates at 0.002433599999996261 seconds  
924 R Squared SCORE:  
925 -15.804516868120512  
926 Run Completed at 0.9584103999999982 seconds.  
927  
928 Creating Data for DescTree_NoMaxDepth_RUN_3  
929 Model Made at 0.9232565000000008 seconds
```

```
930 Finding Best Fits and Testing Model
931 Created Estimates at 0.001375600000002919 seconds
932 R Squared SCORE:
933 -0.7737539353154934
934 Run Completed at 0.9249129000000025 seconds.
935
936 Creating Data for DescTree_NoMaxDepth_RUN_4
937 Model Made at 1.0224803999999992 seconds
938 Finding Best Fits and Testing Model
939 Created Estimates at 0.0015685000000047467 seconds
940 R Squared SCORE:
941 -1.1829812029331195
942 Run Completed at 1.0246830000000031 seconds.
943
944 Creating Data for DescTree_NoMaxDepth_RUN_5
945 Model Made at 0.9328222000000039 seconds
946 Finding Best Fits and Testing Model
947 Created Estimates at 0.0013775999999978694 seconds
948 R Squared SCORE:
949 0.0015417512285345047
950 Run Completed at 0.934581399999999 seconds.
951
952 Creating Data for DescTree_NoMaxDepth_RUN_6
953 Model Made at 1.090288700000002 seconds
954 Finding Best Fits and Testing Model
955 Created Estimates at 0.002035999999996818 seconds
956 R Squared SCORE:
957 -5.871605753842335
958 Run Completed at 1.0927330000000026 seconds.
959
960 Creating Data for DescTree_NoMaxDepth_RUN_7
961 Model Made at 1.1264150999999956 seconds
962 Finding Best Fits and Testing Model
963 Created Estimates at 0.001661300000002086 seconds
964 R Squared SCORE:
965 -0.03940111266583224
966 Run Completed at 1.1283876999999976 seconds.
967
968 Creating Data for DescTree_NoMaxDepth_RUN_8
969 Model Made at 0.9643335000000022 seconds
970 Finding Best Fits and Testing Model
```

```
971 Created Estimates at 0.0023081999999945424 seconds
972 R Squared SCORE:
973 -0.4004443904480819
974 Run Completed at 0.9671109999999956 seconds.
975
976 Creating Data for DescTree_NoMaxDepth_RUN_9
977 Model Made at 1.4251746999999995 seconds
978 Finding Best Fits and Testing Model
979 Created Estimates at 0.002414100000002861 seconds
980 R Squared SCORE:
981 -0.4543616284500944
982 Run Completed at 1.428259599999997 seconds.
983
984 Creating Data for DescTree_NoMaxDepth_RUN_10
985 Model Made at 1.1651469999999975 seconds
986 Finding Best Fits and Testing Model
987 Created Estimates at 0.0013878000000033808 seconds
988 R Squared SCORE:
989 0.7334666290713571
990 Run Completed at 1.166824999999958 seconds.
991
992 DescTree_NoMaxDepth all runs completed at 10.
       6491245 seconds.
993 DescTree_MaxDepth100
994 Creating Data for DescTree_MaxDepth100_RUN_1
995 Model Made at 0.9099333999999999 seconds
996 Finding Best Fits and Testing Model
997 Created Estimates at 0.0021634000000005926 seconds
998 R Squared SCORE:
999 -4.811037085638401
1000 Run Completed at 0.9124788999999964 seconds.
1001
1002 Creating Data for DescTree_MaxDepth100_RUN_2
1003 Model Made at 1.2142429000000021 seconds
1004 Finding Best Fits and Testing Model
1005 Created Estimates at 0.002559800000000223 seconds
1006 R Squared SCORE:
1007 -1.4744213023991568
1008 Run Completed at 1.2172999000000004 seconds.
1009
1010 Creating Data for DescTree_MaxDepth100_RUN_3
```

```
1011 Model Made at 1.037183399999893 seconds
1012 Finding Best Fits and Testing Model
1013 Created Estimates at 0.001412000000019672 seconds
1014 R Squared SCORE:
1015 0.01175945239920384
1016 Run Completed at 1.0389055999999925 seconds.
1017
1018 Creating Data for DescTree_MaxDepth100_RUN_4
1019 Model Made at 1.0296868000000075 seconds
1020 Finding Best Fits and Testing Model
1021 Created Estimates at 0.0013574000000033948 seconds
1022 R Squared SCORE:
1023 -0.3838808585822846
1024 Run Completed at 1.0313367000000113 seconds.
1025
1026 Creating Data for DescTree_MaxDepth100_RUN_5
1027 Model Made at 1.0295707000000078 seconds
1028 Finding Best Fits and Testing Model
1029 Created Estimates at 0.0016490000000004557 seconds
1030 R Squared SCORE:
1031 0.6304698729349711
1032 Run Completed at 1.0319180000000046 seconds.
1033
1034 Creating Data for DescTree_MaxDepth100_RUN_6
1035 Model Made at 0.9371651000000014 seconds
1036 Finding Best Fits and Testing Model
1037 Created Estimates at 0.0016537999999997055 seconds
1038 R Squared SCORE:
1039 -0.38608542132834467
1040 Run Completed at 0.9393792999999988 seconds.
1041
1042 Creating Data for DescTree_MaxDepth100_RUN_7
1043 Model Made at 1.199091800000005 seconds
1044 Finding Best Fits and Testing Model
1045 Created Estimates at 0.0018857999999966069 seconds
1046 R Squared SCORE:
1047 -0.5244994424076328
1048 Run Completed at 1.2014033000000097 seconds.
1049
1050 Creating Data for DescTree_MaxDepth100_RUN_8
1051 Model Made at 1.5539059000000037 seconds
```

```
1052 Finding Best Fits and Testing Model
1053 Created Estimates at 0.002415599999919686 seconds
1054 R Squared SCORE:
1055 -31.867491707891837
1056 Run Completed at 1.5569614000000058 seconds.
1057
1058 Creating Data for DescTree_MaxDepth100_RUN_9
1059 Model Made at 1.6290486999999985 seconds
1060 Finding Best Fits and Testing Model
1061 Created Estimates at 0.002483599999908154 seconds
1062 R Squared SCORE:
1063 -0.523785104536586
1064 Run Completed at 1.6320781999999951 seconds.
1065
1066 Creating Data for DescTree_MaxDepth100_RUN_10
1067 Model Made at 1.2120736999999906 seconds
1068 Finding Best Fits and Testing Model
1069 Created Estimates at 0.0023582000000033077 seconds
1070 R Squared SCORE:
1071 -1.9958425191088516
1072 Run Completed at 1.2149738999999897 seconds.
1073
1074 DescTree_MaxDepth100 all runs completed at 11.
    777403800000002 seconds.
1075 DescTree_MaxDepth500
1076 Creating Data for DescTree_MaxDepth500_RUN_1
1077 Model Made at 1.2198499999999939 seconds
1078 Finding Best Fits and Testing Model
1079 Created Estimates at 0.001793199999944992 seconds
1080 R Squared SCORE:
1081 -9.046406890284432
1082 Run Completed at 1.2220002999999906 seconds.
1083
1084 Creating Data for DescTree_MaxDepth500_RUN_2
1085 Model Made at 1.4999873000000008 seconds
1086 Finding Best Fits and Testing Model
1087 Created Estimates at 0.001462099999976902 seconds
1088 R Squared SCORE:
1089 0.7634436253890546
1090 Run Completed at 1.501753800000003 seconds.
1091
```

```
1092 Creating Data for DescTree_MaxDepth500_RUN_3
1093 Model Made at 1.2412772000000132 seconds
1094 Finding Best Fits and Testing Model
1095 Created Estimates at 0.002839399999991593 seconds
1096 R Squared SCORE:
1097 -0.4134331110849223
1098 Run Completed at 1.2446246000000087 seconds.
1099
1100 Creating Data for DescTree_MaxDepth500_RUN_4
1101 Model Made at 1.0562950999999998 seconds
1102 Finding Best Fits and Testing Model
1103 Created Estimates at 0.0021081999999950085 seconds
1104 R Squared SCORE:
1105 -0.07154720229639366
1106 Run Completed at 1.0588757999999956 seconds.
1107
1108 Creating Data for DescTree_MaxDepth500_RUN_5
1109 Model Made at 1.0659042000000056 seconds
1110 Finding Best Fits and Testing Model
1111 Created Estimates at 0.0019300000000015416 seconds
1112 R Squared SCORE:
1113 -0.1412899052838896
1114 Run Completed at 1.0684272000000021 seconds.
1115
1116 Creating Data for DescTree_MaxDepth500_RUN_6
1117 Model Made at 0.9939885000000004 seconds
1118 Finding Best Fits and Testing Model
1119 Created Estimates at 0.0020070000000060872 seconds
1120 R Squared SCORE:
1121 -12.026129001924351
1122 Run Completed at 0.9964199000000065 seconds.
1123
1124 Creating Data for DescTree_MaxDepth500_RUN_7
1125 Model Made at 0.9943271000000067 seconds
1126 Finding Best Fits and Testing Model
1127 Created Estimates at 0.001447999999996341 seconds
1128 R Squared SCORE:
1129 0.08405313791563873
1130 Run Completed at 0.9960736000000026 seconds.
1131
1132 Creating Data for DescTree_MaxDepth500_RUN_8
```

```
1133 Model Made at 1.1154103000000077 seconds
1134 Finding Best Fits and Testing Model
1135 Created Estimates at 0.0015157999999928506 seconds
1136 R Squared SCORE:
1137 -1.932103026994136
1138 Run Completed at 1.1173114000000055 seconds.
1139
1140 Creating Data for DescTree_MaxDepth500_RUN_9
1141 Model Made at 0.9756404999999972 seconds
1142 Finding Best Fits and Testing Model
1143 Created Estimates at 0.002104800000012119 seconds
1144 R Squared SCORE:
1145 -0.26133284883720953
1146 Run Completed at 0.9782691000000057 seconds.
1147
1148 Creating Data for DescTree_MaxDepth500_RUN_10
1149 Model Made at 0.9752105999999969 seconds
1150 Finding Best Fits and Testing Model
1151 Created Estimates at 0.0014953999999960388 seconds
1152 R Squared SCORE:
1153 0.1364192139737992
1154 Run Completed at 0.9771506999999957 seconds.
1155
1156 DescTree_MaxDepth500 all runs completed at 11.
161757100000003 seconds.
1157 DescTree_MaxDepth1000
1158 Creating Data for DescTree_MaxDepth1000_RUN_1
1159 Model Made at 1.1781419 seconds
1160 Finding Best Fits and Testing Model
1161 Created Estimates at 0.0022102000000074895 seconds
1162 R Squared SCORE:
1163 -0.0744401243461521
1164 Run Completed at 1.1806755000000067 seconds.
1165
1166 Creating Data for DescTree_MaxDepth1000_RUN_2
1167 Model Made at 1.0728237000000007 seconds
1168 Finding Best Fits and Testing Model
1169 Created Estimates at 0.0014294000000063534 seconds
1170 R Squared SCORE:
1171 -42.63426315139817
1172 Run Completed at 1.0745411000000047 seconds.
```

```
1173
1174 Creating Data for DescTree_MaxDepth1000_RUN_3
1175 Model Made at 0.9713203000000021 seconds
1176 Finding Best Fits and Testing Model
1177 Created Estimates at 0.0013551999999918962 seconds
1178 R Squared SCORE:
1179 -0.3946340829458781
1180 Run Completed at 0.973103100000003 seconds.
1181
1182 Creating Data for DescTree_MaxDepth1000_RUN_4
1183 Model Made at 1.0013854999999978 seconds
1184 Finding Best Fits and Testing Model
1185 Created Estimates at 0.0014416000000068152 seconds
1186 R Squared SCORE:
1187 -0.05005951241297546
1188 Run Completed at 1.0031229000000081 seconds.
1189
1190 Creating Data for DescTree_MaxDepth1000_RUN_5
1191 Model Made at 0.9634420000000006 seconds
1192 Finding Best Fits and Testing Model
1193 Created Estimates at 0.0014125000000007049 seconds
1194 R Squared SCORE:
1195 -1.6697011232510781
1196 Run Completed at 0.9651415000000014 seconds.
1197
1198 Creating Data for DescTree_MaxDepth1000_RUN_6
1199 Model Made at 1.1045198999999997 seconds
1200 Finding Best Fits and Testing Model
1201 Created Estimates at 0.0022268000000025268 seconds
1202 R Squared SCORE:
1203 -0.2284401700338572
1204 Run Completed at 1.107371999999998 seconds.
1205
1206 Creating Data for DescTree_MaxDepth1000_RUN_7
1207 Model Made at 1.3593358999999907 seconds
1208 Finding Best Fits and Testing Model
1209 Created Estimates at 0.0015398000000033107 seconds
1210 R Squared SCORE:
1211 -0.7171853693977577
1212 Run Completed at 1.3615906999999936 seconds.
1213
```

```
1214 Creating Data for DescTree_MaxDepth1000_RUN_8
1215 Model Made at 1.0529626000000007 seconds
1216 Finding Best Fits and Testing Model
1217 Created Estimates at 0.001544800000048978 seconds
1218 R Squared SCORE:
1219 -0.5079042392658257
1220 Run Completed at 1.0548270000000003 seconds.
1221
1222 Creating Data for DescTree_MaxDepth1000_RUN_9
1223 Model Made at 1.1419142000000022 seconds
1224 Finding Best Fits and Testing Model
1225 Created Estimates at 0.0014753999999896905 seconds
1226 R Squared SCORE:
1227 0.03721084273100339
1228 Run Completed at 1.1437535000000025 seconds.
1229
1230 Creating Data for DescTree_MaxDepth1000_RUN_10
1231 Model Made at 1.0294853999999987 seconds
1232 Finding Best Fits and Testing Model
1233 Created Estimates at 0.001510499999948632 seconds
1234 R Squared SCORE:
1235 -2.517589911002628
1236 Run Completed at 1.0312960999999916 seconds.
1237
1238 DescTree_MaxDepth1000 all runs completed at 10.
896083600000011 seconds.
1239 RandomForest_MaxTrees50
1240 Creating Data for RandomForest_MaxTrees50_RUN_1
1241 Model Made at 29.908607700000005 seconds
1242 Finding Best Fits and Testing Model
1243 Created Estimates at 0.00479500000001437 seconds
1244 R Squared SCORE:
1245 0.26504463664426736
1246 Run Completed at 29.9138425 seconds.
1247
1248 Creating Data for RandomForest_MaxTrees50_RUN_2
1249 Model Made at 26.555738199999993 seconds
1250 Finding Best Fits and Testing Model
1251 Created Estimates at 0.00534070000004972 seconds
1252 R Squared SCORE:
1253 0.17714793863933576
```

```
1254 Run Completed at 26.561390800000012 seconds.  
1255  
1256 Creating Data for RandomForest_MaxTrees50_RUN_3  
1257 Model Made at 27.02691799999995 seconds  
1258 Finding Best Fits and Testing Model  
1259 Created Estimates at 0.005785400000007712 seconds  
1260 R Squared SCORE:  
1261 0.5122780237189292  
1262 Run Completed at 27.033163700000017 seconds.  
1263  
1264 Creating Data for RandomForest_MaxTrees50_RUN_4  
1265 Model Made at 24.47587509999996 seconds  
1266 Finding Best Fits and Testing Model  
1267 Created Estimates at 0.005181199999981345 seconds  
1268 R Squared SCORE:  
1269 -0.20246940140156067  
1270 Run Completed at 24.4814858 seconds.  
1271  
1272 Creating Data for RandomForest_MaxTrees50_RUN_5  
1273 Model Made at 24.87574259999995 seconds  
1274 Finding Best Fits and Testing Model  
1275 Created Estimates at 0.006497099999990041 seconds  
1276 R Squared SCORE:  
1277 -0.13354306479308775  
1278 Run Completed at 24.882724199999984 seconds.  
1279  
1280 Creating Data for RandomForest_MaxTrees50_RUN_6  
1281 Model Made at 27.578245599999974 seconds  
1282 Finding Best Fits and Testing Model  
1283 Created Estimates at 0.007246300000019801 seconds  
1284 R Squared SCORE:  
1285 0.20673462588227598  
1286 Run Completed at 27.58602929999998 seconds.  
1287  
1288 Creating Data for RandomForest_MaxTrees50_RUN_7  
1289 Model Made at 25.2416015 seconds  
1290 Finding Best Fits and Testing Model  
1291 Created Estimates at 0.004639499999996133 seconds  
1292 R Squared SCORE:  
1293 -2.238088971713222  
1294 Run Completed at 25.246559600000012 seconds.
```

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1295
1296 Creating Data for RandomForest_MaxTrees50_RUN_8
1297 Model Made at 26.639230999999995 seconds
1298 Finding Best Fits and Testing Model
1299 Created Estimates at 0.004666600000007293 seconds
1300 R Squared SCORE:
1301 -0.06544456969389945
1302 Run Completed at 26.644185200000038 seconds.
1303
1304 Creating Data for RandomForest_MaxTrees50_RUN_9
1305 Model Made at 24.043073800000002 seconds
1306 Finding Best Fits and Testing Model
1307 Created Estimates at 0.005216799999971045 seconds
1308 R Squared SCORE:
1309 0.24508261113787433
1310 Run Completed at 24.04871739999987 seconds.
1311
1312 Creating Data for RandomForest_MaxTrees50_RUN_10
1313 Model Made at 23.42513580000002 seconds
1314 Finding Best Fits and Testing Model
1315 Created Estimates at 0.0048547000000098706 seconds
1316 R Squared SCORE:
1317 0.46483234534226714
1318 Run Completed at 23.430299400000024 seconds.
1319
1320 RandomForest_MaxTrees50 all runs completed at 259.
     828999 seconds.
1321 RandomForest_MaxTrees100
1322 Creating Data for RandomForest_MaxTrees100_RUN_1
1323 Model Made at 46.76201609999998 seconds
1324 Finding Best Fits and Testing Model
1325 Created Estimates at 0.008574600000031296 seconds
1326 R Squared SCORE:
1327 -0.2476162077179458
1328 Run Completed at 46.77093669999999 seconds.
1329
1330 Creating Data for RandomForest_MaxTrees100_RUN_2
1331 Model Made at 42.49419660000001 seconds
1332 Finding Best Fits and Testing Model
1333 Created Estimates at 0.00827160000000049 seconds
1334 R Squared SCORE:
```

```
1335 -0.1360739808255178
1336 Run Completed at 42.50295270000004 seconds.
1337
1338 Creating Data for RandomForest_MaxTrees100_RUN_3
1339 Model Made at 49.891423799999984 seconds
1340 Finding Best Fits and Testing Model
1341 Created Estimates at 0.012024500000052285 seconds
1342 R Squared SCORE:
1343 0.37215955207246365
1344 Run Completed at 49.903875700000015 seconds.
1345
1346 Creating Data for RandomForest_MaxTrees100_RUN_4
1347 Model Made at 51.307127200000025 seconds
1348 Finding Best Fits and Testing Model
1349 Created Estimates at 0.007869899999946028 seconds
1350 R Squared SCORE:
1351 0.602539531700099
1352 Run Completed at 51.31542069999995 seconds.
1353
1354 Creating Data for RandomForest_MaxTrees100_RUN_5
1355 Model Made at 50.17646290000005 seconds
1356 Finding Best Fits and Testing Model
1357 Created Estimates at 0.010561199999983728 seconds
1358 R Squared SCORE:
1359 0.0625221603472007
1360 Run Completed at 50.18740790000004 seconds.
1361
1362 Creating Data for RandomForest_MaxTrees100_RUN_6
1363 Model Made at 47.04996749999998 seconds
1364 Finding Best Fits and Testing Model
1365 Created Estimates at 0.007053400000017973 seconds
1366 R Squared SCORE:
1367 0.4732036593774448
1368 Run Completed at 47.05728880000004 seconds.
1369
1370 Creating Data for RandomForest_MaxTrees100_RUN_7
1371 Model Made at 49.472058999999945 seconds
1372 Finding Best Fits and Testing Model
1373 Created Estimates at 0.014759099999992031 seconds
1374 R Squared SCORE:
1375 0.635718639742942
```

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1376 Run Completed at 49.48734349999995 seconds.  
1377  
1378 Creating Data for RandomForest_MaxTrees100_RUN_8  
1379 Model Made at 45.93605319999995 seconds  
1380 Finding Best Fits and Testing Model  
1381 Created Estimates at 0.0066041000000041095 seconds  
1382 R Squared SCORE:  
1383 -0.016622939547341176  
1384 Run Completed at 45.942900599999916 seconds.  
1385  
1386 Creating Data for RandomForest_MaxTrees100_RUN_9  
1387 Model Made at 48.62478539999995 seconds  
1388 Finding Best Fits and Testing Model  
1389 Created Estimates at 0.008097399999996924 seconds  
1390 R Squared SCORE:  
1391 -0.34753961628444396  
1392 Run Completed at 48.63338509999994 seconds.  
1393  
1394 Creating Data for RandomForest_MaxTrees100_RUN_10  
1395 Model Made at 45.81207849999984 seconds  
1396 Finding Best Fits and Testing Model  
1397 Created Estimates at 0.009498600000029 seconds  
1398 R Squared SCORE:  
1399 -1.8830074983541532  
1400 Run Completed at 45.822036000000026 seconds.  
1401  
1402 RandomForest_MaxTrees100 all runs completed at 477.  
62415680000004 seconds.  
1403 RandomForest_MaxTrees150  
1404 Creating Data for RandomForest_MaxTrees150_RUN_1  
1405 Model Made at 68.5387495 seconds  
1406 Finding Best Fits and Testing Model  
1407 Created Estimates at 0.01666910000005828 seconds  
1408 R Squared SCORE:  
1409 0.21364149633529228  
1410 Run Completed at 68.55592720000004 seconds.  
1411  
1412 Creating Data for RandomForest_MaxTrees150_RUN_2  
1413 Model Made at 74.56746120000003 seconds  
1414 Finding Best Fits and Testing Model  
1415 Created Estimates at 0.011886900000035894 seconds
```

```
1416 R Squared SCORE:  
1417 0.1482632466860212  
1418 Run Completed at 74.5796822000001 seconds.  
1419  
1420 Creating Data for RandomForest_MaxTrees150_RUN_3  
1421 Model Made at 74.28659599999992 seconds  
1422 Finding Best Fits and Testing Model  
1423 Created Estimates at 0.020804400000088208 seconds  
1424 R Squared SCORE:  
1425 0.3403746363883714  
1426 Run Completed at 74.30799339999999 seconds.  
1427  
1428 Creating Data for RandomForest_MaxTrees150_RUN_4  
1429 Model Made at 71.64343570000005 seconds  
1430 Finding Best Fits and Testing Model  
1431 Created Estimates at 0.010518300000057934 seconds  
1432 R Squared SCORE:  
1433 -5.052192243024725  
1434 Run Completed at 71.6544014000001 seconds.  
1435  
1436 Creating Data for RandomForest_MaxTrees150_RUN_5  
1437 Model Made at 68.43702430000008 seconds  
1438 Finding Best Fits and Testing Model  
1439 Created Estimates at 0.011020400000006703 seconds  
1440 R Squared SCORE:  
1441 -0.05468006312312057  
1442 Run Completed at 68.44835760000001 seconds.  
1443  
1444 Creating Data for RandomForest_MaxTrees150_RUN_6  
1445 Model Made at 67.73607020000009 seconds  
1446 Finding Best Fits and Testing Model  
1447 Created Estimates at 0.011750000000120053 seconds  
1448 R Squared SCORE:  
1449 -0.1382451320780862  
1450 Run Completed at 67.74813210000002 seconds.  
1451  
1452 Creating Data for RandomForest_MaxTrees150_RUN_7  
1453 Model Made at 73.46914670000001 seconds  
1454 Finding Best Fits and Testing Model  
1455 Created Estimates at 0.012051200000087192 seconds  
1456 R Squared SCORE:
```

```
1457 0.4640437241861499
1458 Run Completed at 73.48153539999998 seconds.
1459
1460 Creating Data for RandomForest_MaxTrees150_RUN_8
1461 Model Made at 77.64886770000021 seconds
1462 Finding Best Fits and Testing Model
1463 Created Estimates at 0.012847899999997026 seconds
1464 R Squared SCORE:
1465 -0.17072352952277958
1466 Run Completed at 77.66212240000004 seconds.
1467
1468 Creating Data for RandomForest_MaxTrees150_RUN_9
1469 Model Made at 74.09055420000004 seconds
1470 Finding Best Fits and Testing Model
1471 Created Estimates at 0.011330899999848043 seconds
1472 R Squared SCORE:
1473 -0.06831988243418152
1474 Run Completed at 74.10222479999993 seconds.
1475
1476 Creating Data for RandomForest_MaxTrees150_RUN_10
1477 Model Made at 74.78121140000007 seconds
1478 Finding Best Fits and Testing Model
1479 Created Estimates at 0.01632219999987683 seconds
1480 R Squared SCORE:
1481 -0.15893867261278616
1482 Run Completed at 74.79787160000001 seconds.
1483
1484 RandomForest_MaxTrees150 all runs completed at 725.
      3389122 seconds.
1485 R^2 SCORES GREATEST TO LOWEST:
1486 KNN_Neighbor3_RUN_4: 0.8692979144959179
1487 KNN_Neighbor1_RUN_1: 0.8225284603493205
1488 Lasso_Regression_RUN_6: 0.7993125116158283
1489 DescTree_MaxDepth500_RUN_2: 0.7634436253890546
1490 DescTree_NoMaxDepth_RUN_10: 0.7334666290713571
1491 KNN_Neighbor1_RUN_5: 0.724589843833128
1492 RandomForest_MaxTrees100_RUN_7: 0.635718639742942
1493 DescTree_MaxDepth100_RUN_5: 0.6304698729349711
1494 SVM_LINEAR_RUN_1: 0.6270490830397577
1495 RandomForest_MaxTrees100_RUN_4: 0.602539531700099
1496 KNN_Neighbor9_RUN_4: 0.5643522861894917
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1497	RandomForest_MaxTrees50_RUN_3:	0.5122780237189292
1498	KNN_Neighbor5_RUN_5:	0.49724368567891664
1499	RandomForest_MaxTrees100_RUN_6:	0.4732036593774448
1500	KNN_Neighbor7_RUN_7:	0.46884575069346346
1501	RandomForest_MaxTrees50_RUN_10:	0.46483234534226714
1502	RandomForest_MaxTrees150_RUN_7:	0.4640437241861499
1503	KNN_Neighbor3_RUN_9:	0.4169674227281114
1504	KNN_Neighbor5_RUN_8:	0.41681853718478834
1505	Linear_Regression_RUN_5:	0.4127845916731836
1506	KNN_Neighbor7_RUN_1:	0.38824236564181225
1507	RandomForest_MaxTrees100_RUN_3:	0.37215955207246365
1508	KNN_Neighbor5_RUN_9:	0.3608191128773506
1509	RandomForest_MaxTrees150_RUN_3:	0.3403746363883714
1510	SVM_LINEAR_RUN_2:	0.318170836587755
1511	RandomForest_MaxTrees50_RUN_1:	0.26504463664426736
1512	RandomForest_MaxTrees50_RUN_9:	0.24508261113787433
1513	KNN_Neighbor1_RUN_8:	0.2321649236433505
1514	RandomForest_MaxTrees150_RUN_1:	0.21364149633529228
1515	KNN_Neighbor3_RUN_7:	0.21138589144091335
1516	RandomForest_MaxTrees50_RUN_6:	0.20673462588227598
1517	Linear_Regression_RUN_3:	0.1920087830039794
1518	SVM_LINEAR_RUN_10:	0.19140456321126076
1519	SVM_POLY_RUN_7:	0.18409950767031147
1520	KNN_Neighbor5_RUN_2:	0.18061550832344642
1521	RandomForest_MaxTrees50_RUN_2:	0.17714793863933576
1522	SVM_LINEAR_RUN_7:	0.16748262025348892
1523	KNN_Neighbor1_RUN_6:	0.1604296308385823
1524	RandomForest_MaxTrees150_RUN_2:	0.1482632466860212
1525	DescTree_MaxDepth500_RUN_10:	0.1364192139737992
1526	KNN_Neighbor9_RUN_1:	0.1320145503711142
1527	SVM_LINEAR_RUN_6:	0.11223126873280431
1528	KNN_Neighbor9_RUN_8:	0.11145881597808693
1529	SVM_SIGMOID_RUN_8:	0.10014188317010098
1530	SVM_RBF_RUN_5:	0.09031657406669635
1531	KNN_Neighbor7_RUN_2:	0.08457970103627921
1532	DescTree_MaxDepth500_RUN_7:	0.08405313791563873
1533	Linear_Regression_RUN_9:	0.0771977571067739
1534	KNN_Neighbor9_RUN_9:	0.07270588222175
1535	RandomForest_MaxTrees100_RUN_5:	0.0625221603472007
1536	SVM_RBF_RUN_8:	0.05566389083990031
1537	KNN_Neighbor9_RUN_10:	0.0390347809098871

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1538 DescTree_MaxDepth1000_RUN_9: 0.03721084273100339
1539 SVM_LINEAR_RUN_5: 0.02794108753516522
1540 KNN_Neighbor5_RUN_6: 0.027754800719210215
1541 KNN_Neighbor3_RUN_6: 0.014864410860958133
1542 DescTree_MaxDepth100_RUN_3: 0.01175945239920384
1543 SVM_RBF_RUN_2: 0.005650786327318191
1544 KNN_Neighbor7_RUN_6: 0.002441146147452833
1545 DescTree_NoMaxDepth_RUN_5: 0.0015417512285345047
1546 DescTree_NoMaxDepth_RUN_1: -0.00019573635454306348
1547 KNN_Neighbor7_RUN_3: -0.0011146931481091915
1548 KNN_Neighbor3_RUN_8: -0.005499932892321313
1549 KNN_Neighbor9_RUN_5: -0.012208311679628991
1550 KNN_Neighbor9_RUN_2: -0.014541416058708734
1551 RandomForest_MaxTrees100_RUN_8: -0.
    016622939547341176
1552 SVM_POLY_RUN_1: -0.03161867653422101
1553 SVM_RBF_RUN_9: -0.03706777329336641
1554 DescTree_NoMaxDepth_RUN_7: -0.03940111266583224
1555 SVM_SIGMOID_RUN_1: -0.04003697475472179
1556 SVM_RBF_RUN_7: -0.04587220344947318
1557 DescTree_MaxDepth1000_RUN_4: -0.05005951241297546
1558 SVM_SIGMOID_RUN_9: -0.051210528132604294
1559 RandomForest_MaxTrees150_RUN_5: -0.
    05468006312312057
1560 KNN_Neighbor3_RUN_2: -0.06176610236235458
1561 RandomForest_MaxTrees50_RUN_8: -0.06544456969389945
1562 SVM_SIGMOID_RUN_3: -0.06718413281628477
1563 RandomForest_MaxTrees150_RUN_9: -0.
    06831988243418152
1564 DescTree_MaxDepth500_RUN_4: -0.07154720229639366
1565 SVM_POLY_RUN_5: -0.07356051396750951
1566 DescTree_MaxDepth1000_RUN_1: -0.0744401243461521
1567 SVM_SIGMOID_RUN_7: -0.08855568352595689
1568 KNN_Neighbor5_RUN_10: -0.09810635714122973
1569 SVM_RBF_RUN_3: -0.10320539098736714
1570 SVM_POLY_RUN_4: -0.1151907206491436
1571 SVM_SIGMOID_RUN_6: -0.11833116575103975
1572 KNN_Neighbor7_RUN_4: -0.12159934759252145
1573 Lasso_Regression_RUN_4: -0.12166625433226619
1574 SVM_POLY_RUN_9: -0.12181090555393337
1575 RandomForest_MaxTrees50_RUN_5: -0.13354306479308775

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1576	RandomForest_MaxTrees100_RUN_2:	-0.1360739808255178
1577	RandomForest_MaxTrees150_RUN_6:	-0.1382451320780862
1578	DescTree_MaxDepth500_RUN_5:	-0.14128990528388896
1579	KNN_Neighbor3_RUN_3:	-0.14546936695476997
1580	Linear_Regression_RUN_10:	-0.14632647395717568
1581	RandomForest_MaxTrees150_RUN_10:	-0. 15893867261278616
1582	RandomForest_MaxTrees150_RUN_8:	-0. 17072352952277958
1583	KNN_Neighbor5_RUN_1:	-0.17171761808564723
1584	Lasso_Regression_RUN_9:	-0.17386235549955242
1585	SVM_SIGMOID_RUN_2:	-0.1771439358534368
1586	Lasso_Regression_RUN_3:	-0.192139381694044
1587	SVM_POLY_RUN_6:	-0.19648729298989975
1588	SVM_RBF_RUN_6:	-0.1989075938255127
1589	RandomForest_MaxTrees50_RUN_4:	-0.20246940140156067
1590	KNN_Neighbor3_RUN_1:	-0.2039694564925889
1591	SVM_SIGMOID_RUN_4:	-0.21099918197403777
1592	SVM_SIGMOID_RUN_10:	-0.2203324288456321
1593	DescTree_MaxDepth1000_RUN_6:	-0.2284401700338572
1594	KNN_Neighbor7_RUN_9:	-0.2314563530523388
1595	KNN_Neighbor1_RUN_9:	-0.23649388149319606
1596	RandomForest_MaxTrees100_RUN_1:	-0.2476162077179458
1597	DescTree_MaxDepth500_RUN_9:	-0.26133284883720953
1598	KNN_Neighbor9_RUN_3:	-0.2712206371270498
1599	SVM_RBF_RUN_4:	-0.2852513120190676
1600	SVM_POLY_RUN_3:	-0.29575211799326917
1601	Lasso_Regression_RUN_1:	-0.30377309286984167
1602	SVM_RBF_RUN_1:	-0.3117099901080511
1603	Linear_Regression_RUN_8:	-0.3167905311165913
1604	KNN_Neighbor5_RUN_3:	-0.32491463337198656
1605	Linear_Regression_RUN_4:	-0.32662557490148747
1606	RandomForest_MaxTrees100_RUN_9:	-0. 34753961628444396
1607	KNN_Neighbor7_RUN_5:	-0.37236381996031587
1608	DescTree_MaxDepth100_RUN_4:	-0.3838808585822846
1609	DescTree_MaxDepth100_RUN_6:	-0.38608542132834467
1610	DescTree_MaxDepth1000_RUN_3:	-0.3946340829458781
1611	DescTree_NoMaxDepth_RUN_8:	-0.4004443904480819
1612	KNN_Neighbor1_RUN_3:	-0.4018303759383075
1613	KNN_Neighbor1_RUN_10:	-0.4029296355613563

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1614 DescTree_MaxDepth500_RUN_3: -0.4134331110849223
1615 SVM_SIGMOID_RUN_5: -0.419449579370724
1616 SVM_RBF_RUN_10: -0.4262316794086567
1617 KNN_Neighbor7_RUN_10: -0.42915390398076037
1618 KNN_Neighbor1_RUN_2: -0.43184554052997726
1619 KNN_Neighbor7_RUN_8: -0.438340374845567
1620 KNN_Neighbor5_RUN_4: -0.4457411738583814
1621 SVM_LINEAR_RUN_8: -0.4487607708606549
1622 DescTree_NoMaxDepth_RUN_9: -0.4543616284500944
1623 Lasso_Regression_RUN_8: -0.4636350440073569
1624 Lasso_Regression_RUN_5: -0.4869633515086398
1625 SVM_POLY_RUN_8: -0.49655114762366837
1626 DescTree_MaxDepth1000_RUN_8: -0.5079042392658257
1627 Linear_Regression_RUN_2: -0.5232104803012878
1628 DescTree_MaxDepth100_RUN_9: -0.523785104536586
1629 DescTree_MaxDepth100_RUN_7: -0.5244994424076328
1630 SVM_POLY_RUN_2: -0.5994498568695761
1631 DescTree_MaxDepth1000_RUN_7: -0.7171853693977577
1632 DescTree_NoMaxDepth_RUN_3: -0.7737539353154934
1633 KNN_Neighbor9_RUN_6: -0.7951571295949154
1634 KNN_Neighbor5_RUN_7: -0.8560235592077987
1635 KNN_Neighbor9_RUN_7: -0.8907045775201934
1636 Lasso_Regression_RUN_10: -0.8975002566982191
1637 KNN_Neighbor1_RUN_7: -1.0758480993245878
1638 DescTree_NoMaxDepth_RUN_4: -1.1829812029331195
1639 KNN_Neighbor1_RUN_4: -1.1896165698638685
1640 KNN_Neighbor3_RUN_10: -1.351697703573878
1641 DescTree_MaxDepth100_RUN_2: -1.4744213023991568
1642 DescTree_MaxDepth1000_RUN_5: -1.6697011232510781
1643 RandomForest_MaxTrees100_RUN_10: -1.
     8830074983541532
1644 DescTree_MaxDepth500_RUN_8: -1.932103026994136
1645 DescTree_MaxDepth100_RUN_10: -1.9958425191088516
1646 RandomForest_MaxTrees50_RUN_7: -2.238088971713222
1647 Lasso_Regression_RUN_2: -2.4041173384407513
1648 Linear_Regression_RUN_6: -2.4913573701529677
1649 DescTree_MaxDepth1000_RUN_10: -2.517589911002628
1650 Linear_Regression_RUN_7: -2.856521569400413
1651 SVM_LINEAR_RUN_4: -4.226657259378865
1652 KNN_Neighbor3_RUN_5: -4.645363886626538
1653 DescTree_MaxDepth100_RUN_1: -4.811037085638401
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1654 RandomForest_MaxTrees150_RUN_4: -5.052192243024725
1655 DescTree_NoMaxDepth_RUN_6: -5.871605753842335
1656 SVM_LINEAR_RUN_9: -7.2326563921261435
1657 DescTree_MaxDepth500_RUN_1: -9.046406890284432
1658 Lasso_Regression_RUN_7: -11.746946470572293
1659 DescTree_MaxDepth500_RUN_6: -12.026129001924351
1660 DescTree_NoMaxDepth_RUN_2: -15.804516868120512
1661 Linear_Regression_RUN_1: -15.849014250669683
1662 DescTree_MaxDepth100_RUN_8: -31.867491707891837
1663 SVM_POLY_RUN_10: -39.77396333418999
1664 DescTree_MaxDepth1000_RUN_2: -42.63426315139817
1665 SVM_LINEAR_RUN_3: -72.67041642787733
1666
1667 AVG R^2 SCORES GREATEST TO LOWEST:
1668 KNN_Neighbor5: -0.041325169688133156
1669 RandomForest_MaxTrees100: -0.048471669948925176
1670 KNN_Neighbor7: -0.0649919529060605
1671 RandomForest_MaxTrees50: -0.07684258262368202
1672 KNN_Neighbor9: -0.10642657563101662
1673 SVM_RBF: -0.125661469185758
1674 SVM_SIGMOID: -0.12931017278543372
1675 KNN_Neighbor1: -0.17988512440469123
1676 RandomForest_MaxTrees150: -0.4476776419199844
1677 KNN_Neighbor3: -0.49012508093765506
1678 Lasso_Regression: -1.5991291034007138
1679 Linear_Regression: -2.1827855118715673
1680 DescTree_MaxDepth500: -2.290832600942684
1681 DescTree_NoMaxDepth: -2.379225224783012
1682 DescTree_MaxDepth100: -4.132481411655891
1683 SVM_POLY: -4.15202850587009
1684 DescTree_MaxDepth1000: -4.875700684132333
1685 SVM_LINEAR: -8.313421139088275
1686
1687 Finished at 1558.3404091 seconds
1688
1689 Process finished with exit code 0
1690
```