```
1 C:\Users\A02290684\AppData\Local\Programs\Python\Python37\
  python.exe "C:/Users/A02290684/Desktop/clean energy/
  Project/.idea/Acorn Csv/Acorn Merged Prediction.py"
 2 Using TensorFlow backend.
 3
               energy sum weather cluster ... Acorn value3
     Acorn value4
 4 day
 5 2011-12-08
                  10.401
                                          2
                                                            85
               76
 6 2011-12-09
                  19.200
                                                            85
               76
 7 2011-12-10
                   16.977
                                                            85
                                         1
                                             . . .
               76
                   24.725
 8 2011-12-11
                                                            85
                                         1
                                             . . .
               76
 9 2011-12-12
                   17.176
                                         2
                                                            85
                                             . . .
               76
                   28.143
10 2011-12-13
                                         2
                                                            85
                                             . . .
               76
11 2011-12-14
                  23.295
                                          2
                                                            85
               76
12 2011-12-15
                   18.007
                                                            85
                                         2
                                             . . .
               76
13 2011-12-16
                   19.771
                                                            85
                                         1
                                             . . .
               76
               13.233
14 2011-12-17
                                         1
                                                            85
                                             . . .
               76
15
16 [10 rows x 7 columns]
17 This problem is unconstrained.
18 RUNNING THE L-BFGS-B CODE
19
20
21
22 Machine precision = 2.220D-16
23 N =
                 18
                         M =
                                       10
24
25 At XO 0 variables are exactly at the bounds
26
27 At iterate 0
                     f = 3.21348D + 00
                                         |proj g| = 6.43374D-
  02
28
29 At iterate
                 5
                      f = 3.19765D + 00
                                          |proj g| = 4.18346D-
```

## File - Acorn Merged Prediction

```
29 02
30
31 At iterate
               10 	 f = 3.19504D + 00
                                      |proj g| = 5.93036D-
  03
32
33 At iterate
               15
                   f= 3.19365D+00
                                      |proj g| = 1.25401D-
  02
34
35 At iterate
               20
                   f = 3.19186D + 00
                                      |proj q| = 1.28493D-
  02
36
37 At iterate
               25
                    f = 3.17737D + 00
                                       |proj q| = 1.18567D-
  01
38
39 At iterate
               30 	 f = 3.17485D + 00
                                       |proj g| = 8.82292D-
  03
40
41 At iterate
               35
                    f= 3.17281D+00
                                       |proj g| = 5.10786D-
  03
42
43 At iterate 40
                   f = 3.17274D+00
                                       |proj q| = 2.11356D-
  03
44
45 At iterate 45
                   f= 3.17268D+00
                                       |proj g| = 1.67449D-
  02
46
47 At iterate
               50
                    f = 3.17260D + 00 | proj g| = 2.14514D-
  0.3
48
49
50
51 Tit = total number of iterations
52 Tnf = total number of function evaluations
53 Thint = total number of segments explored during Cauchy
  searches
54 Skip = number of BFGS updates skipped
55 Nact = number of active bounds at final generalized
  Cauchy point
56 Projg = norm of the final projected gradient
57 F
      = final function value
58
59
60
61
     N
          Tit
                  Tnf Tnint
                             Skip Nact
                                          Projg
                                                        F
62
     18
            50
                   60
                                0
                                     0
                                          2.145D-03
                                                     3.
```

```
62 173D+00
63 	 F = 3.1726027976362250
64
65 STOP: TOTAL NO. of ITERATIONS REACHED LIMIT
66
67 Cauchy
                        time 0.000E+00 seconds.
68 Subspace minimization time 0.000E+00 seconds.
69 Line search
                       time 0.000E+00 seconds.
70
71 Total User time 0.000E+00 seconds.
72
73
             energy sum weather cluster ...
  Acorn value4 predicted
74 day
                                      . . .
75 2014-01-20 29.709
  50 22.735841
76 2014-01-21 34.734
                                      1 ...
  50 17.337770
77 2014-01-22 32.480
                                     1
  50 32.071594
78 2014-01-23 39.367
                                      1
                                       . . .
  50 31.521592
79 2014-01-24 29.418
                                      1
  50 34.555459
80 2014-01-25 32.832
  50 29.410265
81 2014-01-26 41.147
                                      2
                                       . . .
  50 29.729849
82 2014-01-27 26.678
                                     2
  50 30.809756
83 2014-01-28 43.997
                                     1 ...
  50 27.788003
84 2014-01-29 41.014
                                      1 ...
  50 35.421786
85
86 [10 rows x 8 columns]
             energy sum weather cluster ...
  Acorn value4 predicted
88 day
89 2011-12-08
                 10.401
                                      2 ...
```

```
89 76
       23.184576
 90 2011-12-09
                    19.200
    76
       10.402143
 91 2011-12-10
                    16.977
    76
       19.295650
 92 2011-12-11
                    24.725
    76
       16.977918
 93 2011-12-12
                    17.176
                                          2
    76 24.630920
 94 2011-12-13
                    28.143
                                          2
    76
       17.177132
 95 2011-12-14
                    23.295
    76
       28.143725
 96 2011-12-15
                    18.007
                                          2
       23.295946
    76
 97 2011-12-16
                    19.771
    76
       18.103114
 98 2011-12-17
                    13.233
                                          1
    76 19.771961
 99
100 [10 rows x 8 columns]
101 2019-12-03 14:48:03,276 ERROR - Monitor initialization
    failed with error 80070002 (1). Automatic configuration
    updates will not be received
102 2019-12-03 14:48:03,376 ERROR - 2460 Unable to get icon
    for location (The operation completed successfully.): C:\
    Users\A02290684\Videos
103 2019-12-03 14:48:03,386 ERROR - 2460 Unable to get icon
    for location (The operation completed successfully.): C:\
    Users\A02290684\Searches
104 2019-12-03 14:48:03,394 ERROR - 2460 Unable to get icon
    for location (The operation completed successfully.): C:\
   Users\A02290684\Saved Games
105 2019-12-03 14:48:03,396 ERROR - 2460 Unable to get icon
    for location (The operation completed successfully.): C:\
    Users\A02290684\Pictures
106 2019-12-03 14:48:03,398 ERROR - 2460 Unable to get icon
    for location (The operation completed successfully.): C:\
    Users\A02290684\OneDrive
107 2019-12-03 14:48:03,400 ERROR - 2460 Unable to get icon
    for location (The operation completed successfully.): C:\
    Users\A02290684\Music
108 2019-12-03 14:48:03,408 ERROR - 2460 Unable to get icon
    for location (The operation completed successfully.): C:\
    Users\A02290684\Links
```

- 109 2019-12-03 14:48:03,413 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Favorites
- 110 2019-12-03 14:48:03,416 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Downloads
- 111 2019-12-03 14:48:03,418 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Documents
- 112 2019-12-03 14:48:03,421 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Desktop
- 113 2019-12-03 14:48:03,426 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Contacts
- 114 2019-12-03 14:48:03,429 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\3D Objects
- 115 2019-12-03 14:48:03,844 ERROR 12736 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\.android
- 116 2019-12-03 14:48:03,849 ERROR 12492 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\3D Objects
- 117 2019-12-03 14:48:03,850 ERROR 7892 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Contacts
- 118 2019-12-03 14:48:03,851 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Desktop
- 119 2019-12-03 14:48:03,851 ERROR 12492 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Documents
- 120 2019-12-03 14:48:03,852 ERROR 7892 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Downloads
- 121 2019-12-03 14:48:03,852 ERROR 2460 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Favorites
- 122 2019-12-03 14:48:03,853 ERROR 12492 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Links
- 123 2019-12-03 14:48:03,853 ERROR 7892 Unable to get icon for location (The operation completed successfully.): C:\Users\A02290684\Music

124 2019-12-03 14:48:03,854 ERROR - 2460 Unable to get icon for location (The operation completed successfully.): C:\ Users\A02290684\OneDrive 125 2019-12-03 14:48:03,854 ERROR - 12736 Unable to get icon for location (The operation completed successfully.): C:\ Users\A02290684\Pictures 126 2019-12-03 14:48:03,855 ERROR - 7892 Unable to get icon for location (The operation completed successfully.): C:\ Users\A02290684\Saved Games 127 2019-12-03 14:48:03,856 ERROR - 2036 Unable to get icon for location (The operation completed successfully.): C:\ Users\A02290684\Searches 128 2019-12-03 14:48:03,858 ERROR - 2460 Unable to get icon for location (The operation completed successfully.): C:\ Users\A02290684\Videos 129 130 Process finished with exit code 0 131