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 2 Welcome to Calvin Ng 's Feature Selection Algorithm
 3 Type in the name of the file to test : cs_170_small43.txt
 4
 5 Type the number of the algorithm you want to run.
 6
 7 1)Forward Selection
 8 2)Backward Elimination
 9             1
10 This dataset has 10 features (not including the class
   attribute), with 100 instances.
11
12 Please wait while I normalize the data… Done!
13
14 Running nearest neighbor with all 10 features, using “
   leaving-one-out” evaluation, I get an accuracy of 73.0%
15
16 Beginning Search.
17
18      Using feature(s)[1] accuracy is 73.0
19      Using feature(s)[2] accuracy is 67.0
20      Using feature(s)[3] accuracy is 76.0
21      Using feature(s)[4] accuracy is 70.0
22      Using feature(s)[5] accuracy is 68.0
23      Using feature(s)[6] accuracy is 64.0
24      Using feature(s)[7] accuracy is 73.0
25      Using feature(s)[8] accuracy is 65.0
26      Using feature(s)[9] accuracy is 89.0
27      Using feature(s)[10] accuracy is 64.0
28
29 Feature(s) set[9] was best, accuracy is 89.0
30
31      Using feature(s)[1, 9] accuracy is 95.0
32      Using feature(s)[2, 9] accuracy is 78.0
33      Using feature(s)[3, 9] accuracy is 83.0
34      Using feature(s)[4, 9] accuracy is 79.0
35      Using feature(s)[5, 9] accuracy is 74.0
36      Using feature(s)[6, 9] accuracy is 84.0
37      Using feature(s)[7, 9] accuracy is 88.0
38      Using feature(s)[8, 9] accuracy is 82.0
39      Using feature(s)[9, 10] accuracy is 82.0
40
41 Feature(s) set[1, 9] was best, accuracy is 95.0
42
43      Using feature(s)[1, 9, 2] accuracy is 87.0
44      Using feature(s)[1, 9, 3] accuracy is 90.0
45      Using feature(s)[1, 9, 4] accuracy is 88.0
46      Using feature(s)[1, 9, 5] accuracy is 88.0
47      Using feature(s)[1, 9, 6] accuracy is 89.0
48      Using feature(s)[1, 9, 7] accuracy is 90.0
49      Using feature(s)[1, 9, 8] accuracy is 89.0
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50      Using feature(s)[1, 9, 10] accuracy is 88.0
51
52 (Warning, Accuracy has decreased! Continuing search in case
    of local maxima)
53
54 Feature(s) set[1, 3, 9] was best, accuracy is 90.0
55
56      Using feature(s)[1, 3, 9, 2] accuracy is 85.0
57      Using feature(s)[1, 3, 9, 4] accuracy is 90.0
58      Using feature(s)[1, 3, 9, 5] accuracy is 88.0
59      Using feature(s)[1, 3, 9, 6] accuracy is 89.0
60      Using feature(s)[1, 3, 9, 7] accuracy is 90.0
61      Using feature(s)[1, 3, 9, 8] accuracy is 85.0
62      Using feature(s)[1, 3, 9, 10] accuracy is 84.0
63
64 Addition of features is not improving the model
65
66 Finished Search!! The best feature subset is [1, 9], which
   has an accuracy of 95.0
67
68 Process finished with exit code 0
69
```