

# winequality-white.csv

num\_iters = 2000, rate = 0.0007

Run#: 1

The seed for random thetas initializing: 1

Thetas initial vector: [4.17022005e-01 7.20324493e-01 1.14374817e-04 3.02332573e-01

1.46755891e-01 9.23385948e-02 1.86260211e-01 3.45560727e-01

3.96767474e-01 5.38816734e-01 4.19194514e-01]

COST: 1.273808978115495

Thetas [[ 4.53193111 0.22214898 -0.09162065 0.03100279 0.02875089 -0.09783848  
0.0620798 -0.07623436 -0.17199018 0.29364328 0.09377446]]

Last 10 costs [1.28578867 1.2844502 1.28311358 1.28177881 1.2804459 1.27911483  
1.27778561 1.27645822 1.27513268 1.27380898]

Run#: 2

The seed for random thetas initializing: 1

Thetas initial vector: [4.17022005e-01 7.20324493e-01 1.14374817e-04 3.02332573e-01

1.46755891e-01 9.23385948e-02 1.86260211e-01 3.45560727e-01

3.96767474e-01 5.38816734e-01 4.19194514e-01]

COST: 1.273808978115495

Thetas [[ 4.53193111 0.22214898 -0.09162065 0.03100279 0.02875089 -0.09783848  
0.0620798 -0.07623436 -0.17199018 0.29364328 0.09377446]]

Last 10 costs [1.28578867 1.2844502 1.28311358 1.28177881 1.2804459 1.27911483  
1.27778561 1.27645822 1.27513268 1.27380898]

Run#: 3

The seed for random thetas initializing: 6

Thetas initial vector: [0.89286015 0.33197981 0.82122912 0.04169663 0.10765668  
0.59505206

0.52981736 0.41880743 0.33540785 0.62251943 0.43814143]

COST: 1.144168659220114

Thetas [[ 4.64921384e+00 1.66648708e-01 1.09549583e-01 1.76911435e-02  
3.57373911e-03 1.97611255e-02 2.00729452e-01 -1.61520334e-01  
-2.00442315e-01 2.75531152e-01 1.06313861e-01]]

Last 10 costs [1.1545276 1.15337018 1.15221437 1.15106017 1.14990758 1.1487566  
1.14760721 1.14645943 1.14531325 1.14416866]

Run#: 4

The seed for random thetas initializing: 5

Thetas initial vector: [0.22199317 0.87073231 0.20671916 0.91861091 0.48841119  
0.61174386

0.76590786 0.51841799 0.2968005 0.18772123 0.08074127]

COST: 1.328444491574898

Thetas [[ 4.48386116 0.22435125 -0.00899756 0.17390706 0.17121705 0.02201777  
0.22709708 -0.15373254 -0.41164764 0.28584338 0.01897024]]

Last 10 costs [1.34133768 1.33989707 1.33845847 1.33702189 1.33558732 1.33415475  
1.33272419 1.33129563 1.32986906 1.32844449]

Run#: 5

The seed for random thetas initializing: 7

Thetas initial vector: [0.07630829 0.77991879 0.43840923 0.72346518 0.97798951  
0.53849587

0.50112046 0.07205113 0.26843898 0.4998825 0.67923 ]  
COST: 1.3877842341895896  
Thetas [[ 4.44795332 0.27602353 0.04904899 0.14943703 0.46825353 0.0468647  
0.21935881 -0.33878587 -0.53630176 0.37723312 0.19760549]]  
Last 10 costs [1.40141538 1.39989234 1.39837143 1.39685264 1.39533596 1.3938214  
1.39230895 1.39079861 1.38929037 1.38778423]

=====  
Run#: 6  
The seed for random thetas initializing: 6  
Thetas initial vector: [0.89286015 0.33197981 0.82122912 0.04169663 0.10765668  
0.59505206  
0.52981736 0.41880743 0.33540785 0.62251943 0.43814143]  
COST: 1.144168659220114  
Thetas [[ 4.64921384e+00 1.66648708e-01 1.09549583e-01 1.76911435e-02  
3.57373911e-03 1.97611255e-02 2.00729452e-01 -1.61520334e-01  
-2.00442315e-01 2.75531152e-01 1.06313861e-01]]  
Last 10 costs [1.1545276 1.15337018 1.15221437 1.15106017 1.14990758 1.1487566  
1.14760721 1.14645943 1.14531325 1.14416866]

=====  
Run#: 7  
The seed for random thetas initializing: 5  
Thetas initial vector: [0.22199317 0.87073231 0.20671916 0.91861091 0.48841119  
0.61174386  
0.76590786 0.51841799 0.2968005 0.18772123 0.08074127]  
COST: 1.328444491574898  
Thetas [[ 4.48386116 0.22435125 -0.00899756 0.17390706 0.17121705 0.02201777  
0.22709708 -0.15373254 -0.41164764 0.28584338 0.01897024]]  
Last 10 costs [1.34133768 1.33989707 1.33845847 1.33702189 1.33558732 1.33415475  
1.33272419 1.33129563 1.32986906 1.32844449]

=====  
Run#: 8  
The seed for random thetas initializing: 5  
Thetas initial vector: [0.22199317 0.87073231 0.20671916 0.91861091 0.48841119  
0.61174386  
0.76590786 0.51841799 0.2968005 0.18772123 0.08074127]  
COST: 1.328444491574898  
Thetas [[ 4.48386116 0.22435125 -0.00899756 0.17390706 0.17121705 0.02201777  
0.22709708 -0.15373254 -0.41164764 0.28584338 0.01897024]]  
Last 10 costs [1.34133768 1.33989707 1.33845847 1.33702189 1.33558732 1.33415475  
1.33272419 1.33129563 1.32986906 1.32844449]

=====  
Run#: 9  
The seed for random thetas initializing: 4  
Thetas initial vector: [0.96702984 0.54723225 0.97268436 0.71481599 0.69772882  
0.2160895  
0.97627445 0.00623026 0.25298236 0.43479153 0.77938292]  
COST: 1.1558854297811216  
Thetas [[ 4.6674949 0.20215902 0.22928577 0.19753077 0.29307544 -0.06784451  
0.43669762 -0.46655145 -0.39695292 0.29799386 0.22734764]]  
Last 10 costs [1.16613765 1.16499224 1.1638484 1.16270613 1.16156543 1.1604263  
1.15928874 1.15815274 1.15701831 1.15588543]

=====  
Run#: 10  
The seed for random thetas initializing: 2  
Thetas initial vector: [0.4359949 0.02592623 0.54966248 0.43532239 0.4203678  
0.33033482  
0.20464863 0.61927097 0.29965467 0.26682728 0.62113383]

COST: 1.2474205565734533

Thetas [[ 4.53660748 -0.03172272 0.02794014 0.13517433 0.13096368 -0.06788827  
-0.00819948 0.00848152 -0.2979305 0.12716612 0.16362574]]

Last 10 costs [1.25930174 1.2579742 1.25664851 1.25532469 1.25400271 1.25268259  
1.25136432 1.25004789 1.2487333 1.24742056]

