

Data: (1,1) (2,3) (4,3) (3,2) (5,1)

Initialization:

U: [1, 0, 1, 0, 0]

[0, 1, 0, 1, 1]

v1: [2.5, 2.0]

v2: [3.3333333333333335, 2.0]

Iteration 1

U: [0.664756446991404, 0.6896551724137931, 0.30769230769230765, 0.3076923076923079, 0.34256926952141054]

[0.335243553008596, 0.3103448275862069, 0.6923076923076923, 0.6923076923076921, 0.6574307304785895]

v1: [2.158617198079619, 2.0090211732954586]

v2: [3.639344589427202, 2.019381370375782]

Iteration 2

U: [0.7722782128862224, 0.7836894822540516, 0.19978080835550777, 0.3662350682691167, 0.24123660857519627]

[0.22772178711377752, 0.21631051774594837, 0.8002191916444923, 0.6337649317308832, 0.7587633914248038]

v1: [1.8559240301550655, 1.9996346294045375]

v2: [3.9562519339086633, 2.0347020851447346]

Iteration 3

U: [0.8499489727589312, 0.8232782754091212, 0.1429553723728916, 0.4116020874117367, 0.16558842252518513]

[0.15005102724106878, 0.17672172459087887, 0.8570446276271084, 0.5883979125882633, 0.8344115774748149]

v1: [1.734236009680163, 1.9680925472629458]

v2: [4.12018373587797, 2.0256718188663405]

Iteration 4

U: [0.8796213990486443, 0.8274360573293259, 0.134560457200321, 0.43918348524970013, 0.13598538571986538]

[0.12037860095135573, 0.17256394267067407, 0.8654395427996789, 0.5608165147502998, 0.8640146142801347]

v1: [1.7101885581345104, 1.9469928637970002]

v2: [4.17741356596643, 2.009573282742559]

Iteration 5

U: [0.88805344004251, 0.8275005435750181, 0.1374734538145626, 0.45413598358807783, 0.12641209149203578]

[0.11194655995748995, 0.17249945642498196, 0.8625265461854374, 0.5458640164119221, 0.8735879085079643]

v1: [1.710319473485095, 1.9411128760404301]

v2: [4.199246162704647, 1.9989283317330342]