

Answers to Session 3, for file 2.txt

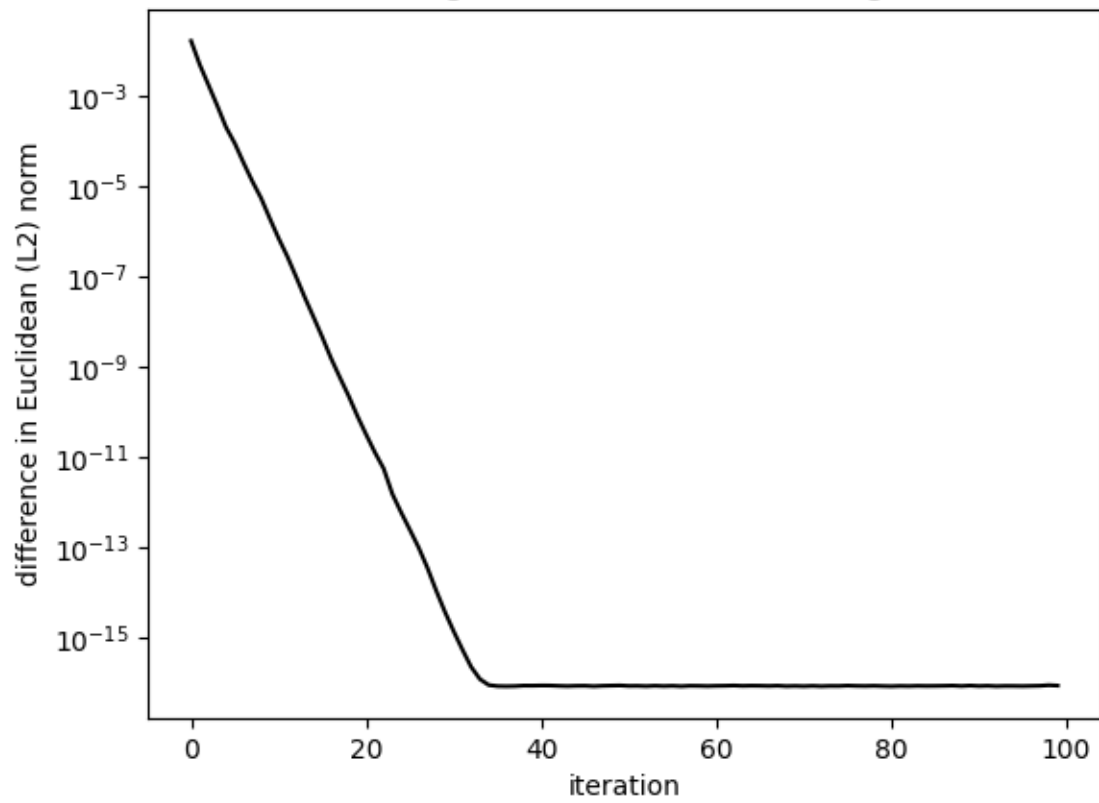
NOTE: You will be evaluated on file 1.txt

This table is provided so you can validate your code

| | | |
|--|------------------------|-----------------------|
| Top in-degrees | In-degree centrality | Out-degree centrality |
| 2007 | 0.007685 | 0.000254 |
| 2008 | 0.006608 | 0.000012 |
| United_States | 0.006596 | 0.000012 |
| United_Kingdom | 0.005410 | 0.000218 |
| France | 0.005156 | 0.001476 |
| Top out-degrees | Out-degree centrality | In-degree centrality |
| .cf | 0.003231 | 0.000048 |
| Book_of_Optics | 0.003171 | 0.000242 |
| Bengali_language | 0.002844 | 0.000351 |
| Dumfries,_VA | 0.002759 | 0.000012 |
| Ahmad_Zarruq | 0.002638 | 0.001404 |
| Top hubs | Hub centrality | Authority centrality |
| .cf | 0.006991 | 0.000000 |
| Book_of_Optics | 0.006978 | 0.000078 |
| Bengali_language | 0.006846 | 0.000140 |
| Erich_Schmidt_(archaeologist) | 0.006811 | 0.000001 |
| 1999_NATO_bombing_of_the_Federal_Republic_- of_Yugoslavia | 0.006803 | 0.000004 |
| Top authorities | Authority centrality | Hub centrality |
| Shams_Tabrizi | 0.006591 | 0.000277 |
| Mahmud_Shabistari | 0.006580 | 0.000300 |
| Al-Ghazali | 0.006541 | 0.000000 |
| Shahab_al-Din_Suhrawardi | 0.006472 | 0.000000 |
| Farid_al-Din_Attar | 0.006460 | 0.000000 |
| Top eigenvector centrality | Eigenvector centrality | |
| 2007 | 0.006334 | |
| United_States | 0.006312 | |
| 2008 | 0.005851 | |
| France | 0.005535 | |
| United_Kingdom | 0.005324 | |
| Top Katz | Katz centrality | |
| 2007 | 0.005583 | |
| United_States | 0.005411 | |
| 2008 | 0.005085 | |
| France | 0.004673 | |
| United_Kingdom | 0.004544 | |
| Top PageRank, alpha = 0.3 | PageRank | |
| United_States | 0.003910 | |
| 2007 | 0.003640 | |
| 2008 | 0.003161 | |
| Wikimedia_Commons | 0.002515 | |
| United_Kingdom | 0.002430 | |

| | | |
|---|-------------------------|--|
| Top PageRank, $\alpha = 0.99$ | PageRank | |
| Portugal | 0.017289 | |
| United_States | 0.015068 | |
| 2007 | 0.012198 | |
| 2008 | 0.009352 | |
| Gholam-Hosseini_Saedi | 0.009268 | |
| Top PageRank, $\alpha = 0.85$ | PageRank | |
| Portugal | 0.012437 | |
| United_States | 0.012286 | |
| 2007 | 0.010234 | |
| 2008 | 0.008120 | |
| Wikimedia_Commons | 0.006970 | |
| Top iterative PageRank, $\alpha = 0.85$ | PageRank, iteration 1 | |
| United_States | 0.009918 | |
| 2007 | 0.009756 | |
| 2008 | 0.008558 | |
| Wikimedia_Commons | 0.006418 | |
| United_Kingdom | 0.006341 | |
| Top iterative PageRank, $\alpha = 0.85$ | PageRank , iteration 2 | |
| United_States | 0.011153 | |
| Portugal | 0.010336 | |
| 2007 | 0.009297 | |
| 2008 | 0.007863 | |
| Gholam-Hosseini_Saedi | 0.007329 | |
| Top iterative PageRank, $\alpha = 0.85$ | PageRank, iteration 5 | |
| Portugal | 0.012426 | |
| United_States | 0.012242 | |
| 2007 | 0.010238 | |
| 2008 | 0.008130 | |
| Gholam-Hosseini_Saedi | 0.007007 | |
| Top iterative PageRank, $\alpha = 0.85$ | PageRank, iteration 10 | |
| Portugal | 0.012437 | |
| United_States | 0.012286 | |
| 2007 | 0.010234 | |
| 2008 | 0.008120 | |
| Wikimedia_Commons | 0.006970 | |
| Top iterative PageRank, $\alpha = 0.85$ | PageRank, iteration 100 | |
| Portugal | 0.012437 | |
| United_States | 0.012286 | |
| 2007 | 0.010234 | |
| 2008 | 0.008120 | |
| Wikimedia_Commons | 0.006970 | |

iterative PageRank vs. closed form PageRank



top 3 articles

