## **CMPE493 Introduction to Information Retrieval**

## Assignment 4 – PageRank for Identifying Central People in News Articles

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Report
-Top 50 scores and Discussion
-Screen shot of running program

## 1 Top 50 Scores:

1-) "reagan": 0.0639567595122776 2-) "james-baker": 0.021120725723504895 3-) "nakasone": 0.015803550299248206 4-) "thatcher": 0.01314893258184361 5-) "lyng": 0.011207861444101899 6-) "stoltenberg": 0.01106168438424693 7-) "Weinberger": 0.009864797939681112 8-) "volcker": 0.009701009315540512 9-) "howard-baker": 0.009050916653763423 10-) "yeutter": 0.008711627157266469 11-) "Gorbachev": 0.0082483736273839312-) "greenspan": 0.008042882268831146 13-) "miyazawa": 0.007298405913834042 14-) "Gephardt": 0.007291066711108133 15-) "kohl": 0.0066639014075025585 16-) "poehl": 0.0065056041417821606 17-) "shultz": 0.005882944919075473 18-) "ozal": 0.00555819888220975 19-) "balladur": 0.005236300194365188 20-) "Howard": 0.005103235371658765 21-) "chirac": 0.005052889201660142 22-) "lawson": 0.00462977038008698323-) "suharto": 0.004627936525894769 24-) "papandreou": 0.004476942433607994 25-) "Fitzwater": 0.004446905030997465 0.0042526833759777226-) "Abe": 27-) "Mulroney": 0.004160202713227486 28-) "bush": 0.0041283172484389875 29-) "sumita": 0.0037956468194088678 30-) "Roosevelt": 0.00373670009693657 31-) "Moore": 0.0036975089793126153 32-) "Carter": 0.003599967419344933333-) "Ruder": 0.003591764506145952 34-) "Schneider": 0.003550341160573563 0.00353641688465889235-) "honda": 36-) "Bentsen": 0.003508239161393707 37-) "saddam-hussein": 0.003500850977594592 38-) "tamura": 0.003423161153720349539-) "Schlesinger": 0.0033662371367925983 40-) "Cochran": 0.003292250510878172341-) "john-paul": 0.0032304778191792325 42-) "Leahy": 0.0032093676716153283 43-) "Byrd": 0.003194637786914252244-) "Kuranari": 0.0031857050389198335 45-) "keating": 0.0031718371491942306 46-) "Reid": 0.0031456429660110027 47-) "Nixon": 0.0031338307913958236 48-) "Foley": 0.0031102039528363616 49-) "Yamamoto": 0.003070872179163643 50-) "sprinkel": 0.003021777856822636

The date of the news and the results are totally made sense. When we look at the top three most popular person in the result. The first person is Reagan, he is the 40<sup>th</sup> president of United States from 1981 to 1989. And at the second rank, James Baker, he served as United States Secretary of the Treasury under President Reagan at the same term. And at the third place, Nakasone is placed. He is the Prime Minister of Japan from 1982 to 1987. So, it is predictable for most known politicians to be seen in news more than anyone else.

## 2 Screen Shot of Running Program:

```
ozan-MacBook-Pro:desktop ozankilic$ /usr/local/bin/python3 /Users/ozankilic/Desktop/ass4.py
           "reagan":
                                 0.0639567595122776
           "james-baker":
                                 0.021120725723504895
           "nakasone":
                                 0.015803550299248206
           "thatcher":
                                 0.01314893258184361
           "lyng":
"stoltenberg":
                                 0.011207861444101899
                                 0.01106168438424693
           "Weinberger":
                                 0.009864797939681112
           "volcker":
                                 0.009701009315540512
           "howard-baker":
                                          0.009050916653763423
       10-) "yeutter":
                                 0.008711627157266469
留
            "Gorbachev":
       11-)
                                 0.00824837362738393
                                 0.008042882268831146
       12-) "greenspan":
        13-) "miyazawa":
                                 0.007298405913834042
            "Gephardt":
       14-)
                                 0.007291066711108133
            "kohl":
       15-)
                                 0.0066639014075025585
       16-) "poehl":
                                 0.0065056041417821606
       17-) "shultz":
                                 0.005882944919075473
            "ozal":
                                 0.00555819888220975
                                 0.005236300194365188
       19-) "balladur":
       20-) "Howard":
                                 0.005103235371658765
            "chirac":
       21-)
                                 0.005052889201660142
       22-) "lawson":
                                 0.004629770380086983
       23-) "suharto":
                                 0.004627936525894769
            "papandreou":
"Fitzwater":
                                 0.004476942433607994
       24-)
                                 0.004446905030997465
       25-)
       26-) "Abe":
                                 0.00425268337597772
        27-) "Mulroney":
                                 0.004160202713227486
       28-)
            "bush":
                                 0.0041283172484389875
            "sumita":
                                 0.0037956468194088678
       29-)
       30-)
            "Roosevelt":
                                 0.00373670009693657
            "Moore":
                                 0.0036975089793126153
       31-)
            "Carter":
                                 0.0035999674193449333
       33-)
            "Ruder":
                                 0.003591764506145952
       34-) "Schneider":
                                 0.003550341160573563
       35-) "honda":
                                 0.003536416884658892
       36-) "Bentsen":
                                 0.003508239161393707
       37-) "saddam-hussein":
                                         0.003500850977594592
       38-) "tamura":
                                 0.0034231611537203495
            "Schlesinger":
                                         0.0033662371367925983
       39-)
       40-) "Cochran":
                                 0.0032922505108781723
       41-) "john-paul":
                                 0.0032304778191792325
            "Ĺeahy":
       42-)
                                 0.0032093676716153283
       43-)
            "Byrd":
                                 0.0031946377869142522
       44-) "Kuranari":
                                 0.0031857050389198335
       45-) "keating":
                                 0.0031718371491942306
            "Reid":
                                 0.0031456429660110027
            "Nixon":
       47-)
                                 0.0031338307913958236
       48-) "Foley":
                                 0.0031102039528363616
            "Yamamoto":
       49 - )
                                 0.003070872179163643
       50-) "sprinkel":
                                 0.003021777856822636
```