# Problem 1.1

Iteration = 10

team\_name w

0 Mary Hardin-Baylor 0.000898

1 Clemson 0.000485

2 Mount Union 0.000579

3 Morningside 0.000938

4 North Dakota St 0.000547

5 Valdosta St 0.009898

6 St John's MN 0.000683

7 Alabama 0.000369

8 UW-Whitewater 0.002500

9 Ferris St 0.000402

10 Johns Hopkins 0.001216

11 Brockport St 0.001377

12 Princeton 0.000178

13 Minn St-Mankato 0.001645

14 Benedictine KS 0.000523

15 Kansas Wesleyan 0.001447

16 Ohio State 0.000066

17 Marian IN 0.000647

18 Bethel MN 0.000010

19 Muhlenberg 0.000372

20 Tarleton St 0.000071

21 Ouachita Baptist 0.000152

22 Georgia 0.003222

23 Notre Dame 0.000069

24 Notre Dame OH 0.000877

Iteration =100

team\_name w

0 Mary Hardin-Baylor 0.000445

1 Clemson 0.000245

2 Alabama 0.000140

3 Mount Union 0.000904

4 St John's MN 0.000768

5 Morningside 0.027211

6 Valdosta St 0.000291

7 North Dakota St 0.000189

8 Georgia 0.002526

9 Ohio State 0.000238

10 Notre Dame 0.000725

11 UW-Whitewater 0.000229

12 Ferris St 0.000234

13 Oklahoma 0.000788

14 Johns Hopkins 0.000362

15 Texas A&M 0.000800

16 LSU 0.000017

17 Florida 0.000240

18 Kentucky 0.000004

19 Texas 0.000097

20 Michigan 0.000029

21 Syracuse 0.000069

22 Central Florida 0.003145

23 Washington St 0.000016

24 Washington 0.000511

Iteration = 1000

team\_name w

0 Clemson 0.000577

1 Alabama 0.000061

2 Georgia 0.000024

3 Ohio State 0.001586

4 Notre Dame 0.001427

5 Oklahoma 0.053666

6 Texas A&M 0.000241

7 LSU 0.000178

8 Florida 0.004716

9 North Dakota St 0.000348

10 Kentucky 0.000207

11 Texas 0.000040

12 Michigan 0.000044

13 Syracuse 0.000520

14 Central Florida 0.000076

15 Mary Hardin-Baylor 0.000106

16 Washington 0.000002

17 Washington St 0.000034

18 Penn State 0.000001

19 Auburn 0.000017

20 Missouri 0.000005

21 Iowa 0.000014

22 Northwestern 0.003145

23 West Virginia 0.000003

24 Fresno St 0.000153

Iteration = 10000

team\_name w

0 Clemson 6.020182e-04

1 Alabama 4.821643e-05

2 Georgia 3.179812e-06

3 Ohio State 1.682704e-03

4 Notre Dame 1.517526e-03

5 Oklahoma 5.722307e-02

6 Texas A&M 2.389311e-04

7 LSU 1.766860e-04

8 Florida 5.015543e-03

9 North Dakota St 3.655535e-04

10 Kentucky 1.702378e-04

11 Texas 5.837816e-06

12 Michigan 5.506202e-06

13 Syracuse 4.648239e-04

14 Central Florida 5.385880e-05

15 Washington 1.341459e-05

16 Washington St 3.085448e-07

17 Penn State 4.529434e-06

18 Auburn 1.150041e-06

19 Missouri 2.312651e-06

20 Iowa 6.169053e-07

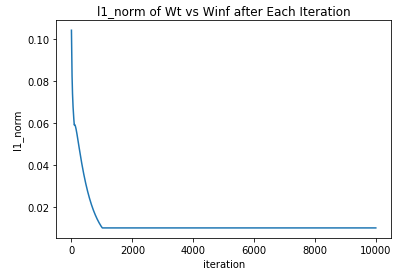
21 Northwestern 9.789275e-06

22 West Virginia 3.145499e-03

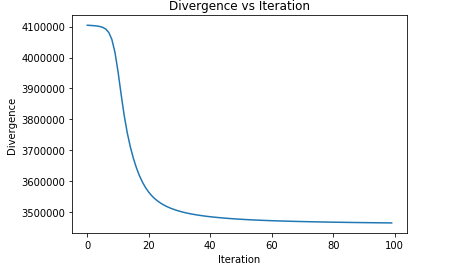
23 Fresno St 5.584810e-07

24 South Carolina 1.284052e-04

# Question 1.2



# Question 2.1



# Question 2.2

Rounded to nearest 4th decimal

Each words and their corresponding weights.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Col 1  pay 0.0227  money 0.0188  state 0.0169  bill 0.0126  cost 0.0114  budget 0.0109  tax 0.0107  law 0.0104  program 0.0102  plan 0.0093 | Col2  music 0.0296  play 0.0130  performance 0.0130  perform 0.0127  song 0.0124  dance 0.0117  sound 0.0106  sing 0.0099  concert 0.0092  band 0.0091 | Col3  building 0.0216  build 0.0149  city 0.0143  space 0.0120  house 0.0116  area 0.0116  project 0.0112  site 0.0105  construction 0.0083  owner 0.0082 | Col4  family 0.0209  woman 0.0201  child 0.0190  man 0.0177  live 0.0146  life 0.0145  friend 0.0136  home 0.0131  young 0.0124  wife 0.0115 | Col5  father 0.0622  mrs 0.0606  son 0.0583  graduate 0.0413  daughter 0.0363  marry 0.0328  degree 0.0286  mother 0.0283  receive 0.0257  ceremony 0.0212 |
| Col 6 percent 0.0263 market 0.0177 price 0.0165 company 0.0139 stock 0.0133  rate 0.0119  share 0.0119  rise 0.0110  sell 0.0106  sale 0.0095 | Col 7  official 0.0137  agreement 0.0109  states 0.0095  meeting 0.0093  plan 0.0086  country 0.0086  leader 0.0083  government 0.0073  american 0.0073  policy 0.0070 | Col 8  case 0.0197  lawyer 0.0178  court 0.0177  charge 0.0177  law 0.0144  judge 0.0118  legal 0.0100  investigation 0.0095  trial 0.0089  official 0.0084 | Col 9  executive 0.0396  president 0.0351  company 0.0221  chief 0.0217  director 0.0167  chairman 0.0149  vice 0.0146  business 0.0141  name 0.0134  yesterday 0.0125 | Col 10  win 0.0221  second 0.0220  third 0.0154  hit 0.0153  victory 0.0138  score 0.0113  finish 0.0101  beat 0.0100  race 0.0099  fourth 0.0099 |
| Col 11  health 0.0196  problem 0.0186  medical 0.0130  cause 0.0129  doctor 0.0127  patient 0.0120  care 0.0115  treatment 0.0103  report 0.0092  hospital 0.0092 | Col 12  food 0.0133  water 0.0094  restaurant 0.0080  serve 0.0079  red 0.0075  small 0.0069  eat 0.0069  dry 0.0068  add 0.0064  green 0.0064 | Col 13  art 0.0184  artist 0.0123  museum 0.0096  design 0.0090  collection 0.0089  exhibition 0.0084  photograph 0.0081  display 0.0074  painting 0.0070  color 0.0065 | Col 14  book 0.0136  write 0.0111  editor 0.0103  history 0.0089  world 0.0082  life 0.0081  page 0.0072  author 0.0063  great 0.0060  view 0.0058 | Col 15  war 0.0194  military 0.0178  government 0.0148  american 0.0137  force 0.0124  states 0.0121  attack 0.0117  country 0.0117  peace 0.0094  leader 0.0083 |
| Col 16  company 0.0239  computer 0.0147  industry 0.0128  product 0.0123  technology 0.0119  sell 0.0108  system 0.0096  customer 0.0094  market 0.0087  service 0.0079 | Col 17  drug 0.0272  test 0.0174  study 0.0172  woman 0.0112  research 0.0108  report 0.0102  researcher 0.0092  evidence 0.0091  scientist 0.0082  disease 0.0079 | Col 18  school 0.0360  student 0.0276  child 0.0142  class 0.0136  education 0.0133  program 0.0132  community 0.0121  college 0.0119  teacher 0.0101  group 0.0101 | Col 19  team 0.0425  game 0.0360  player 0.0296  play 0.0290  season 0.0247  coach 0.0159  league 0.0111  point 0.0092  win 0.0089  sport 0.0087 | Col 20  vote 0.0200  political 0.0187  campaign 0.0185  republican 0.0149  candidate 0.0142  election 0.0141  party 0.0135  democratic 0.0117  state 0.0110  leader 0.0108 |
| Col 21  thing 0.0250  lot 0.0191  really 0.0162  feel 0.0146  big 0.0135  kind 0.0116  little 0.0103  great 0.0097  hard 0.0090  put 0.0089 | Col 22  film 0.0192  character 0.0170  movie 0.0170  play 0.0155  television 0.0136  story 0.0123  novel 0.0092  production 0.0087  write 0.0086  star 0.0086 | Col 23  ask 0.0218  tell 0.0172  question 0.0148  speak 0.0124  answer 0.0108  news 0.0104  reporter 0.0092  letter 0.0083  word 0.0081  interview 0.0080 | Col 24  police 0.0170  city 0.0155  car 0.0143  mile 0.0112  official 0.0105  fire 0.0101  hour 0.0092  street 0.0090  area 0.0077  night 0.0076 | Col 25  keep 0.0107  far 0.0088  bad 0.0082  slow 0.0081  cut 0.0077  move 0.0075  put 0.0074  level 0.0073  lose 0.0070  problem 0.0069 |