

JULY 2009  
M T W T F S S  
1 2 3 4 5  
6 7 8 9 10 11 12  
13 14 15 16 17 18 19  
20 21 22 23 24 25 26  
27 28 29 30 31

AUGUST 2009  
M T W T F S S  
31 1 2  
3 4 5 6 7 8 9  
10 11 12 13 14 15 16  
17 18 19 20 21 22 23  
24 25 26 27 28 29 30

SEPTEMBER 2009  
M T W T F S S  
1 2 3 4 5 6  
7 8 9 10 11 12 13  
14 15 16 17 18 19 20  
21 22 23 24 25 26 27  
28 29 30

OCTOBER 2009  
M T W T F S S  
1 2 3 4  
5 6 7 8 9 10 11  
12 13 14 15 16 17 18  
19 20 21 22 23 24 25  
26 27 28 29 30 31

NOVEMBER 2009  
M T W T F S S  
30 1  
2 3 4 5 6 7 8  
9 10 11 12 13 14 15  
16 17 18 19 20 21 22  
23 24 25 26 27 28 29

DECEMBER 2009  
M T W T F S S  
1 2 3 4 5 6  
7 8 9 10 11 12 13  
14 15 16 17 18 19 20  
21 22 23 24 25 26 27  
28 29 30 31

August 2009

MOST IMPORTANT

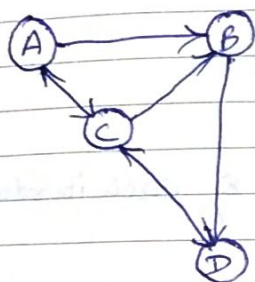
# Page Rank Algorithm

Saturday

Week 31 (Day 213-152)

The iterative formula =

$$PR_{t+1}(P_i) = \sum_{P_j} \frac{PR_t(P_j) \text{ (Previous Iteration value)}}{C(P_j) \text{ (Total no. of outgoing links)}}$$



	Iteration 0	Iteration 1	Iteration 2	Page Rank Iteration 3
A	1/4	1/12	1.5/12	1
B	1/4	2.5/12	2/12	2
C	1/4	4.5/12	4.5/12	4
D	1/4	4/12	4/12	3
Total	1	1	1	4

↔ - indicates that there is a link between each other

Here in the directed graph A points to B, B points to D similarly so on.

To find the page rank -

Step 1 - Since there are totally 4 nodes, the initial iteration 0 has 1/4 as the page rank based on the formula

Note - Initial page rank are not valid page rank it's just an assumption

9 Step 2 - For iteration 1 -

10 ~~For~~ Node A - (No. of nodes pointing towards A)

11 PR(A) =  $\frac{1}{4}$  (Previous iteration value)  
12  $\frac{1}{3}$  (Outgoing from C  
Remaining no. of nodes) =  $\frac{1}{12}$

1 Node B - (No. of nodes pointing towards B)

2  $PR(B) = \frac{1/4}{2} + \frac{1/4}{3}$  (Previous iteration value).  
3 (Outgoing link from A) (Outgoing link from C)

4 Node C -

5  $PR(C) = \frac{1/4}{2} + \frac{1/4}{1}$

Node D -

6  $PR(D) = \frac{1/4}{3} + \frac{1/4}{1}$



2009 August

JANUARY 2009

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY 2009

M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

MARCH 2009

M	T	W	T	F	S	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

APRIL 2009

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

MAY 2009

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE 2009

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

3

Monday

(Day 215-150) Week 32

Step 3 - Iteration 2

$$PR(A) = \frac{4.5/12}{3} \quad \begin{matrix} \text{(Previous Iteration \& Value)} \\ \text{(Total outgoing links from A)} \end{matrix}$$

$$P(B) = \frac{1/12}{2} + \frac{4.5/12}{3}$$

$$P(C) = \frac{1/12}{2} + \frac{4/12}{1}$$

$$P(D) = \frac{2.5/12}{1} + \frac{4.5/12}{3}$$

Step 4 - Sum of Page Rank should be 1

[For that just check by adding the total of each iteration]

Step 5 - Find Page Rank -

Higher the number better the page Rank.

Why D is having a page Rank of 3?

This is because If we have a node of no outgoing link but another node is pointing towards that node it means D will have a higher page Rank.