**PAGE RANK ALGORITHM**

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| **If teleport factor or damping factor is not given we have to take the value of 0.85** |
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| **If an outbound of a->b but b is not pointing to any other then b is the dangling . Dangling links are negative links that are effect to the our web page ranking.**  **If outbounds are 0 then the page contribution rank also 0.**  **Here D is not having any outbounds so the divisiablity factor is 0. The D is called dangling links or dead links.** |
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| **If intial page rank is not given then its always intial page rank is 1 only. For iteration 0 all the page ranking should be 1.**  **Here damping factor d= 0.85** |
| Here PR( C) means inbounding to A or pointing to A that is C is pointing to A so that we took PR(C)  Here PR(C) in that C= intial page rank===1 as they given value=1.  C( c ) =outbound value of C==1. |
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| **At iteration level ==2** |
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| We have to substitute the values that we got on iteration 1.  Please do not round off the value of the page rank.what ever the decimal you get keep it like that.if you round off the values it will effect the page ranking. We go further to check the consistency of the page rank we will add up the last two decimals so don’t round off. |
| We can go for so many iterations till it can get consistent page rank that we will get.  Lets take an another example if it is stored for the same page map that you need to draw a matrix and then calculate its page rank. If it is not specified then we will use the random surf problem where we will use the equation to solve it. |
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| Here ½ means initial page rank value/ no.of outbounds  When we working with a matrix the damping factor usually does not make any difference.  Initial wigen factor=1/3 . if they give any value you can use that other wise you can use 1/3. |
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| Here if we see we get consistent values of the page rank so here we can stop .if not we have to do further, that time this is the iteration=1. Next iteration we have to multiply again with the intial wegan factor to the result. Here the initial wegian vector and result of the vector is same so no need to go for second iteration. |

**PAGE RANK ALGORITM FOR MATRIX**

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| HERE A->B IS ½ BECAUSE A HAS TWO OUT LINKS GOING TO B AND C SO B AND C VALUE IS ½. FOR B THE OUT LINK IS ONE SO THE VALUE IS 1.  Damping factor or teleport factor=0.85  Because we using the webpages the damping factor will keep on changing as move to one page to another page. The matrix remains fixed here and teleport factor will change. But not for the study state transision, we are jumping random surfer jumping to one page to another.so this teleport factor will be calculating again and again |
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Like this we have to calculate upto the rank of the page becomes stable