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Title:Page Ranking

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package javaapplication3;

import java.util.\*;

public class PageRank

{

public int path[][] = new int[10][10];

public double pagerank[] = new double[10];

public void calc(double n)

{

double init;

double c=0;

double temp[] = new double[10];

int i,j,u=1,k=1;

init = 1/n;

System.out.printf(" n value:"+n+"\t init value :"+init+"\n");

for(i=1;i<=n;i++)

this.pagerank[i]=init;

System.out.printf("\n Initial PageRank Values , 0th Step \n");

for(i=1;i<=n;i++)

System.out.printf(" Page Rank of "+i+" is :\t"+this.pagerank[i]+"\n");

while(u<=2)

{

for(i=1;i<=n;i++)

{

temp[i]=this.pagerank[i];

this.pagerank[i]=0;

}

for(i=1;i<=n;i++)

{

for(j=1;j<=n;j++)

{

if(this.path[i][j] == 1)

{

k=1;c=0;

while(k<=n)

{

if(this.path[i][k] == 1 )

c=c+1;

k=k+1;

}

this.pagerank[j]=this.pagerank[j]+temp[i]\*(1/c);

}

}

}

System.out.printf("\n After "+u+"th Step \n");

for(i=1;i<=n;i++)

System.out.printf(" Page Rank of "+i+" is :\t"+this.pagerank[i]+"\n");

u=u+1;

}

}

public static void main(String args[])

{

int nodes,i,j;

Scanner in = new Scanner(System.in);

System.out.println("Enter the Number of WebPages \n");

nodes = in.nextInt();

PageRank p = new PageRank();

System.out.println("Enter the Adjacency Matrix with 1->PATH & 0->NO PATH Between two WebPages: \n");

for(i=1;i<=nodes;i++)

{

for(j=1;j<=nodes;j++)

{

p.path[i][j]=in.nextInt();

if(j==i)

p.path[i][j]=0;

}

}

p.calc(nodes);

}