)uiz, 8 (questions	8/8 points (1
Co	ongratulations! You passed!	Next Item
~	1 / 1 points	
1. What i	s the right definition of a stochastic graph?	
0	A graph where for each vertex the sum of weights of all the outgoing edge	es is equal to one
Corr Tru	ect e. There is no way to trick you!	
\bigcirc	A graph where the sum of all edges' weights is equal to one	
\bigcirc	The graph which exists with certain probability	
Tick th	conditions should THE GRAPH satisfy FOR ITS UNIQUE STATIONARY DISTRIB e true variants Graph by itself is one connected component	UTION TO EXIST ?
Un-s	elected is correct	
	Graph is Stochastic	
Corr Tru	ect e. This is the necessary(необходимое) condition	
	There is a path from every node to every node	
Corr True	ect e. You are absolutely right	

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 \leftarrow

PageRank PageRank	8/8 points (100.00%)
Practice Q uiz, 8 questions The stationary distribution at a vertex is related:	
Tick the true variants	
A probability to get there after the first step	
Un-selected is correct	
To the probability of getting to a certain vertex after quite a big amount of steps.	
Correct	
True. You are learning really fast	
To the amount of time a random walker spends visiting that vertex.	
Correct True. This is a correct answer.	
ride. This is a correct driswer.	
 1/1 points 4. Does the stationary distribution depend on the initial vertex of the random walk process? Yes No Correct True. As far as the stationary distribution is related to the amount of time a random walk spends visiting that vertex after quite a big amount of steps. 	er
1/1 points 5.	
What property should a matrix have to be called a transition for the stochastic graph:	
The sum of the values in each column is equal to one	
The sum of the values in each row is equal to one	
Correct Vos. You are absolutely right	
Yes. You are absolutely right.	
The sum of the values in the matrix is equal to one	

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points

8/8 points (100.00%)

Practice **G**uiz, 8 questions

What does a damping factor at any step mean?

- The probability that the surfer will get bored and will stop surfing
- The ratio of the rated impedance of the loudspeaker to the source impedance.
- The probability that the surfer won't get bored and will continue surfing.

Yes. I see you are looking through my videos very attentively



1/1

In the Page Rank Formula

$$PR(p_i) = \frac{1-d}{N} + d\sum_{p_j \in \Gamma(p_i)} \frac{PR(p_j)}{L(p_j)}$$

what meaning does the fraction below have?

$$\frac{1-d}{N}$$

- There is a probability for every page to be chosen if a random surfer doesn't get bored
- There's a probability for every page to be chosen after a random surfer gets bored

Yep, You quickly grasp the essence



1/1

Why will iterations of page rank algorithm converge?

Because after the damping factor is introduced, the graph of the world wide web satisfies all the conditions for the unique stationary distribution existence.

Correct

Yes, you are definitely right

- Because after the damping factor is introduced, there will be a moment when a random surfer gets extremely bored and stops surfing
- Because the probability for each new step of a random surfer is getting smaller and smaller with each new iteration of page rank algorithm



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