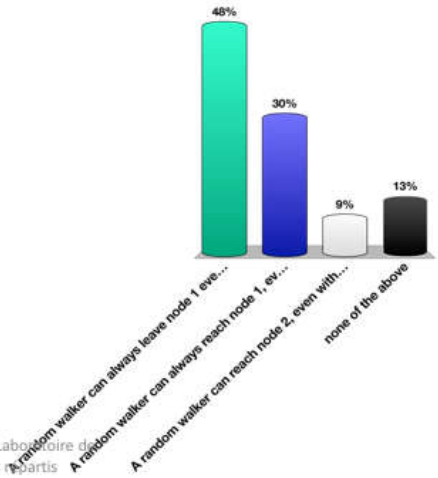
Consider the following matrix for assigning random jump probabilities

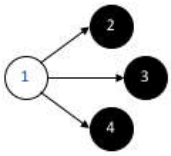
$$\begin{pmatrix} \frac{1}{3} & 0 & 0 \\ \frac{1}{3} & 0 & 0 \\ \frac{1}{3} & 0 & 0 \end{pmatrix}$$

It means

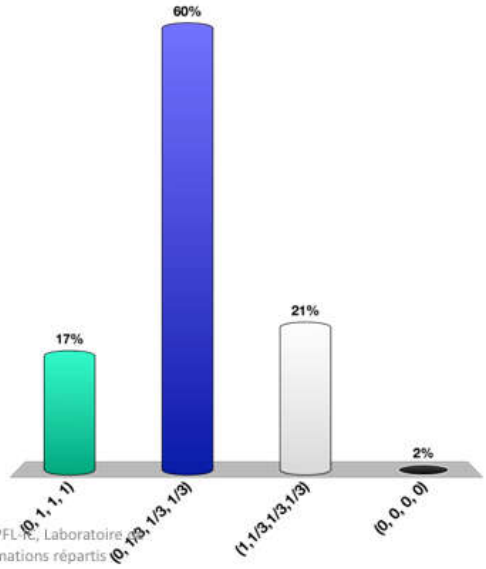
1. A random walker can always leave node 1 even without outgoing edges
2. A random walker can always reach node 1, even without incoming edges
3. A random walker can always leave node 2, even without outgoing edges
4. none of the above



The authority values of this graph are



1. (0, 1, 1, 1)
2. (0, 1/3, 1/3, 1/3)
3. (1,1/3,1/3,1/3)
4. (0, 0, 0, 0)



Which one is true? Hint: Think about worst case scenario

1. Exploiting locality with gap encoding may increase the size of an adjacency list
2. Exploiting similarity with reference lists may increase the size of an adjacency list
3. Both of the above is true
4. None of the above is true