1. What are degrees of separation in a graph?

Answer = The degrees of separation in a graph is Search for minimum cost connection between groups of people.

1. How many users does Facebook have (as per the writing of the article)?

Answer = The users does Facebook have; it was estimated at 1.59 billion.

1. What is the average degree of separation for people in the US?

Answer = The average degree of separation for people in the US is 3.46 degree.

1. Assume that each person on Facebook has 50 friends (a conservative low

estimate). Assume also that friends do not overlap.

* 1. What is the number of friends-of-friends of a person?

Answer = The number of friends-of-friends of a person is 50 X 50 = 2500.

* 1. What is the number of friends-of-friends-of-friends of a person?

Answer = The number of friends-of-friends-of-friends of a person is 2500 X 50 = 125000.

1. Why is Breadth First Search NOT used to calculate paths and degrees of separation in the Facebook graph? What do they use instead? How does that affect the results? (are the results exact?)
2. Answer = The Breadth First Search NOT used to calculate paths and degrees of separation in the Facebook graph is because, consume a lot of memory especially and dealing with a huge number will make it more difficult.
3. They used Hash function.
4. Faster, less memory, short path and approximately outcome
5. What couple of software tools do they use in their calculations and what is each one used for?
6. Answer = The couple of software tools do they use in their calculations and is each one used by Flajolet-Martin algorithms; is a powerful method of approximating the number of distinct elements.
7. Central Limit Theorem: it is used for sampling distributions, how we draw all possible samples of size n from a given population.
8. What does the title “Calculating degrees-of-separation at scale” mean?

Answer = The title “Calculating degrees-of-separation at scale” implies that the most accurate ways of study the distance distribution of graphs orders of magnitude larger than it was previously possible.