Let us revisit what we proved just now, I'm going to ask you a very straight forward question, for all the vertices in the graph if the degree is greater than or equal to n/2, you say there is a Hamilton cycle.
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Look at another theorem this is called the Ore's theorem, which states for any two vertices X and Y if the degrees are such that degree of X + degree of Y is greater than or equal to N, then there is a Hamilton cycle.
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Ore's theorem:

For any two vertices x and y, if

$$\deg x + \deg y \geq n$$

then, there is a Hamilton Cycle.

I repeat, for any pair of vertices that you choose, the sum total of their degree should be greater than or equal to n, then there is a Hamilton cycle, note it is not n/2, it is n here unlike the previous theorem.

Now my question to you all is which one is more general? What do I mean by that? By that I mean you see take all multiples of 4, correct, and take all even numbers, right, the condition of a number being multiple of 4 is more particular a case than the condition that a number is even, you see this multiples of 4 is subset of multiples of 2 which is even, correct.
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Similarly one of these theorems is a particular case of the other theorem,
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and the other theorem is a general case of the particular theorem, which one is what, do you even understand my question, think about it.