

Dynamic Programming

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Simple Explanations

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1 Prerequisites

- Counting
- Target Audience: 5

2 An Explanation In Cookies

Person A: “Here, have a batch of cookies:”



A: “How many cookies did I give you?”

Person B: “[counting...] You gave me 10 cookies.”

A: “Here, have another batch of cookies:”



B: “[rapid response] You gave me 11 cookies!”

A: “How did you know so quickly?”

B: “There’s only one more than in the first batch.”

A: “So you didn’t recount because you remembered there were 10 in the first batch! Dynamic Programming is just a fancy way to say ‘remembering stuff to save time later’.”

3 References

- Carnegie Mellon Fall 2010 15211 Fundamentals of Algorithms and Data Structures, Dr. Bill Schleris and Dr. Chris Langmead
- Inspired by Jonathan Paulson's answer on quora: <http://www.quora.com/Computer-Programming/How-should-I-explain-dynamic-programming-to-a-4-year-old/answer/Jonathan-Paulson>