



Different General Methods in Algorithms Design

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Last Lecture

- Short Presentations
- Big picture about methods in algorithms design
- Recursive methods in algorithms
- **Application of Programming in the Digital Age!**



Today

- Short Presentations
- Review the last lecture
- Searching and sorting applications
- Introduction to Searching and sorting algorithms
- **Application of Programming in the Digital Age!**



Together

Send your feedback about the
class whenever you want!



Contact me

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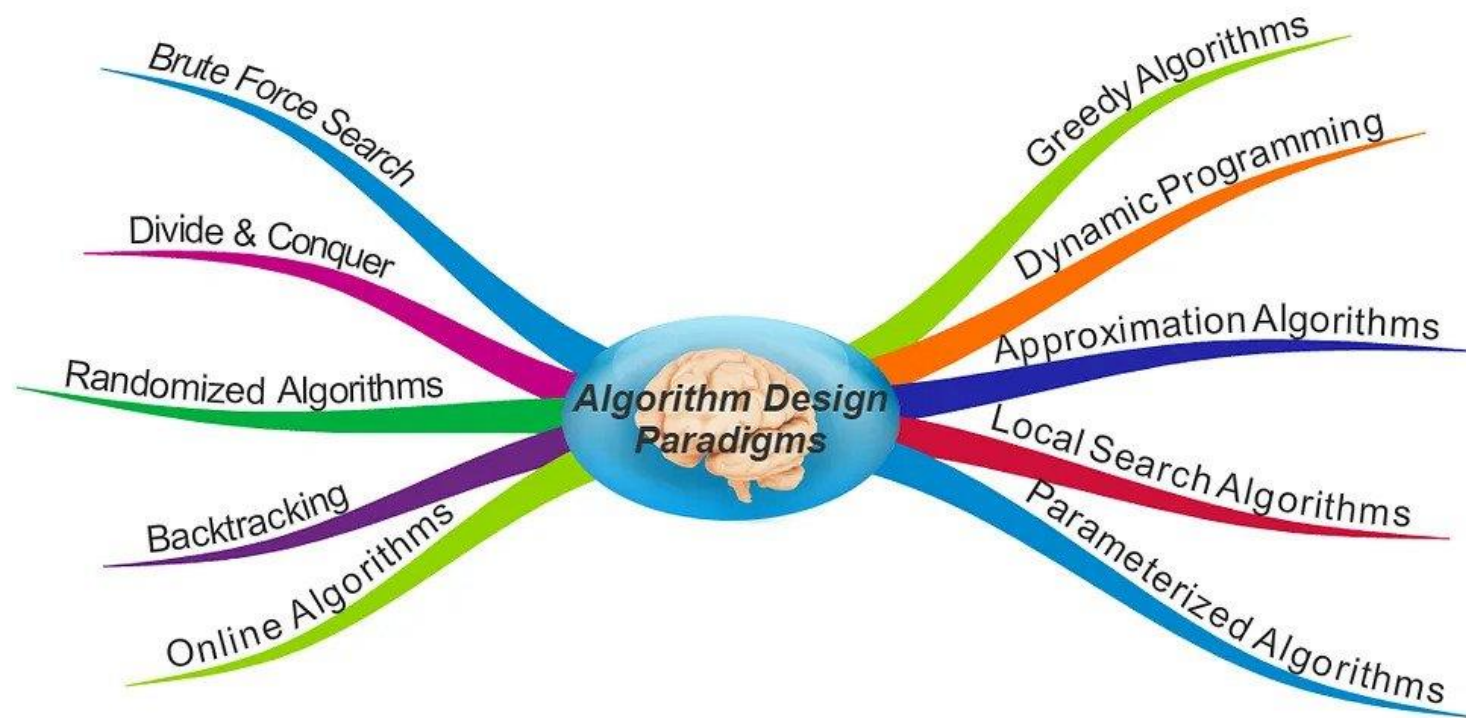


Short Presentations

Review the Last Lecture



Algorithm design paradigms





Recursive mindset

- We use, as humans, recursive methods in our life. When we want to be ready for exam, Think about it...
- *What is your idea about example in real life?*



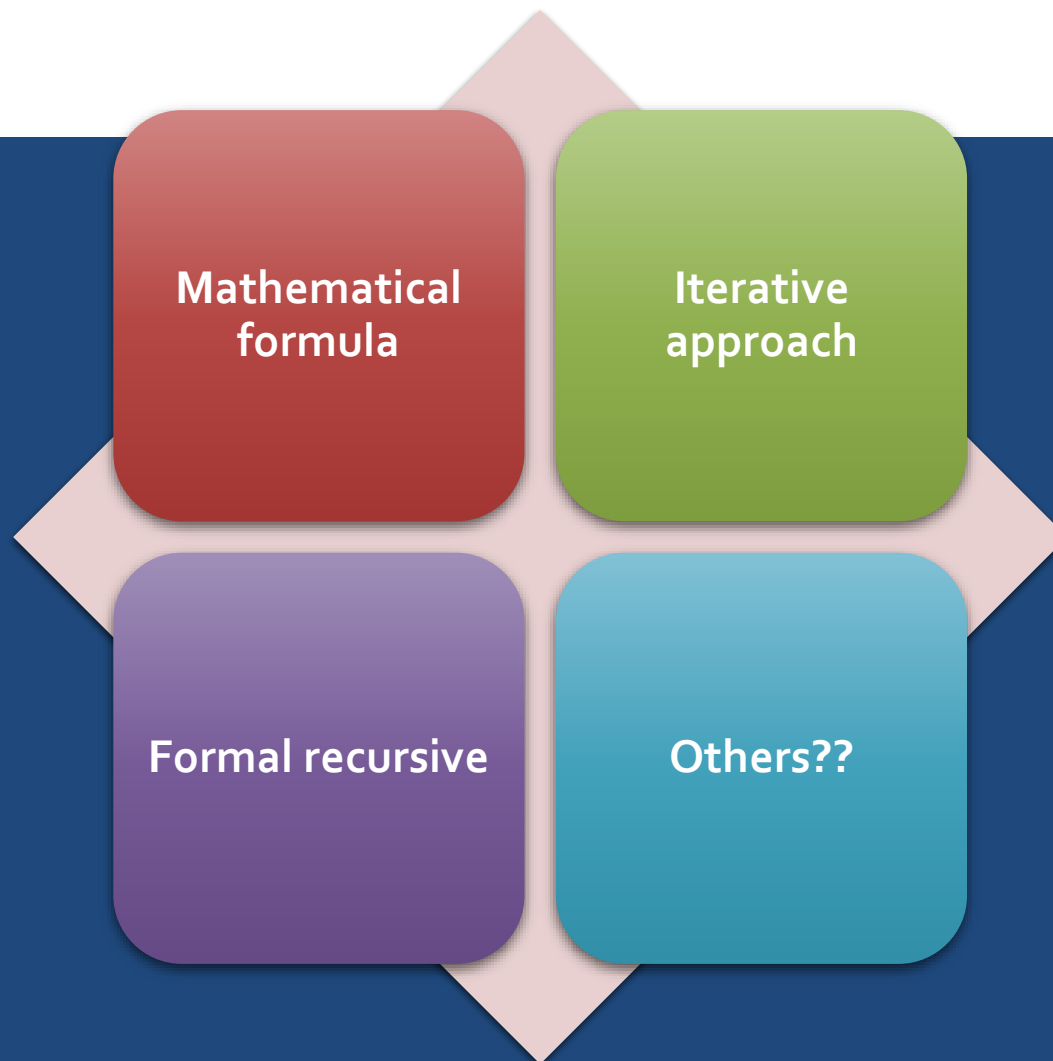
Backtrack

Solve the base

Divide many times



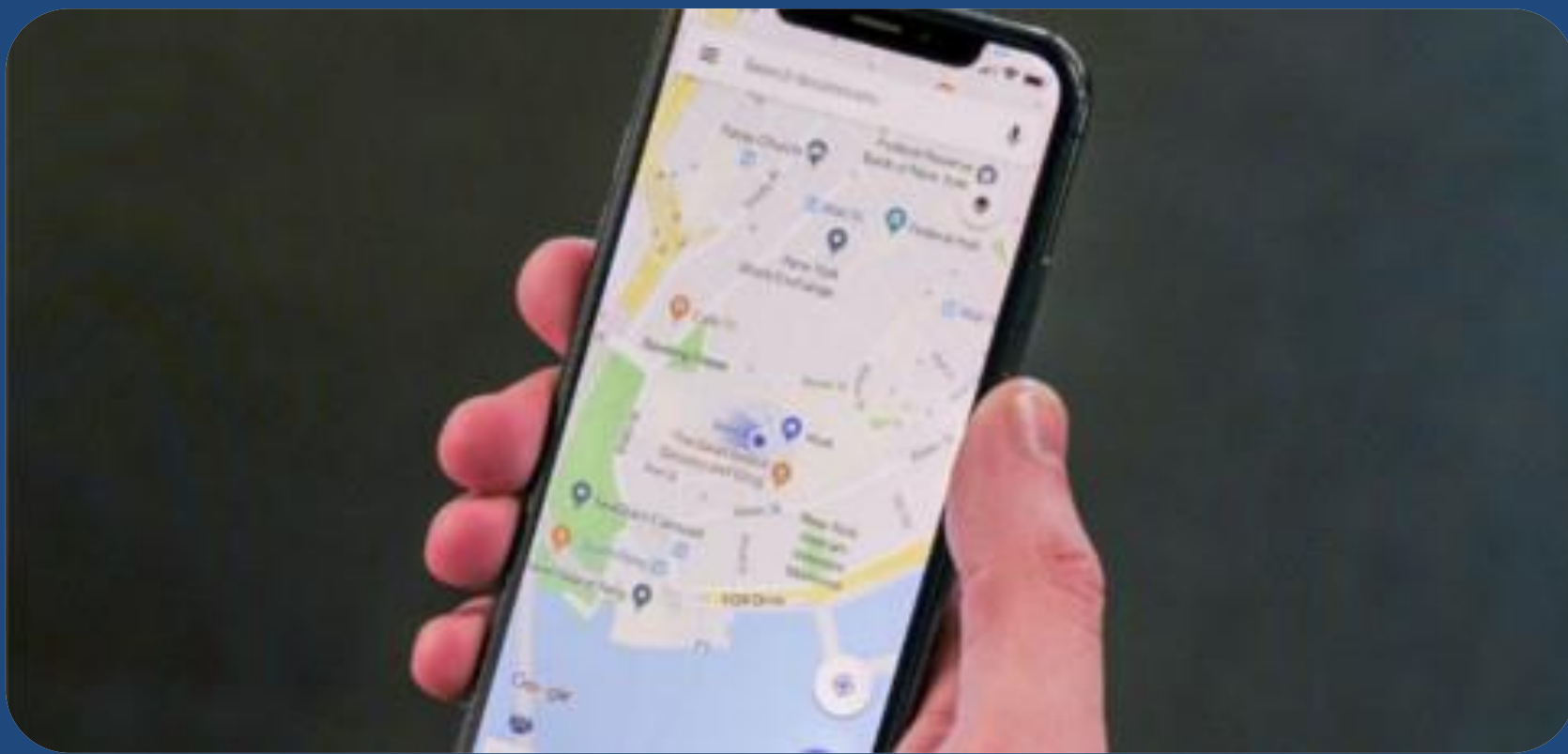
3 attitudes?



Searching and Sorting Applications

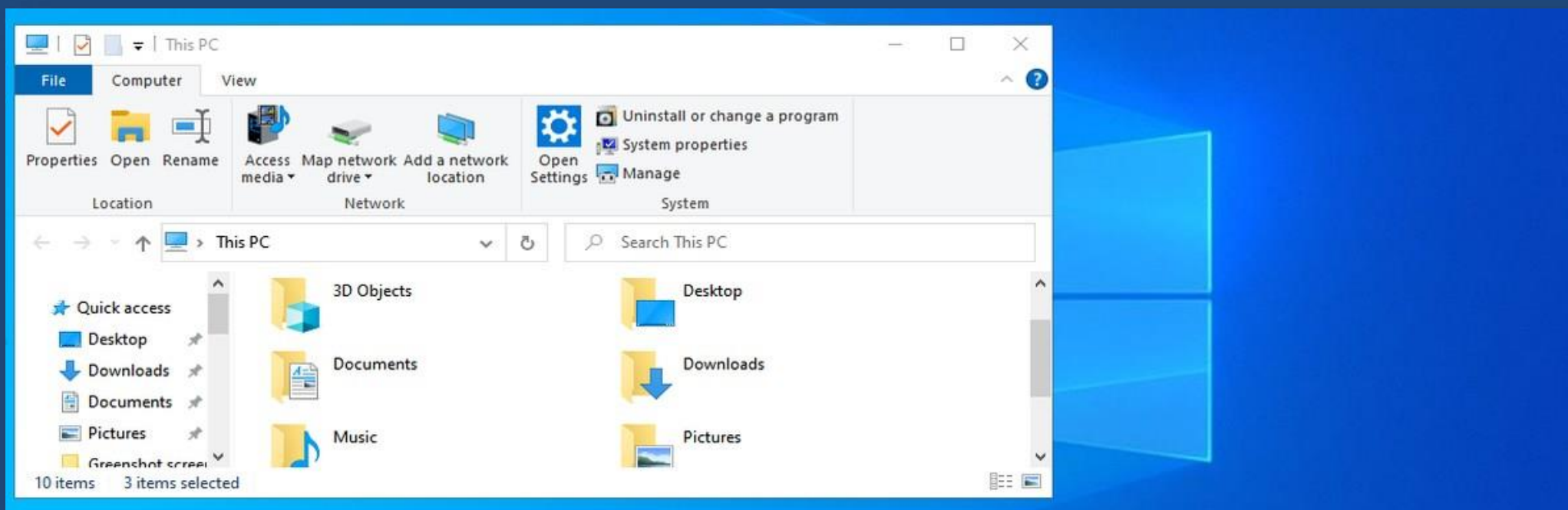


Maps



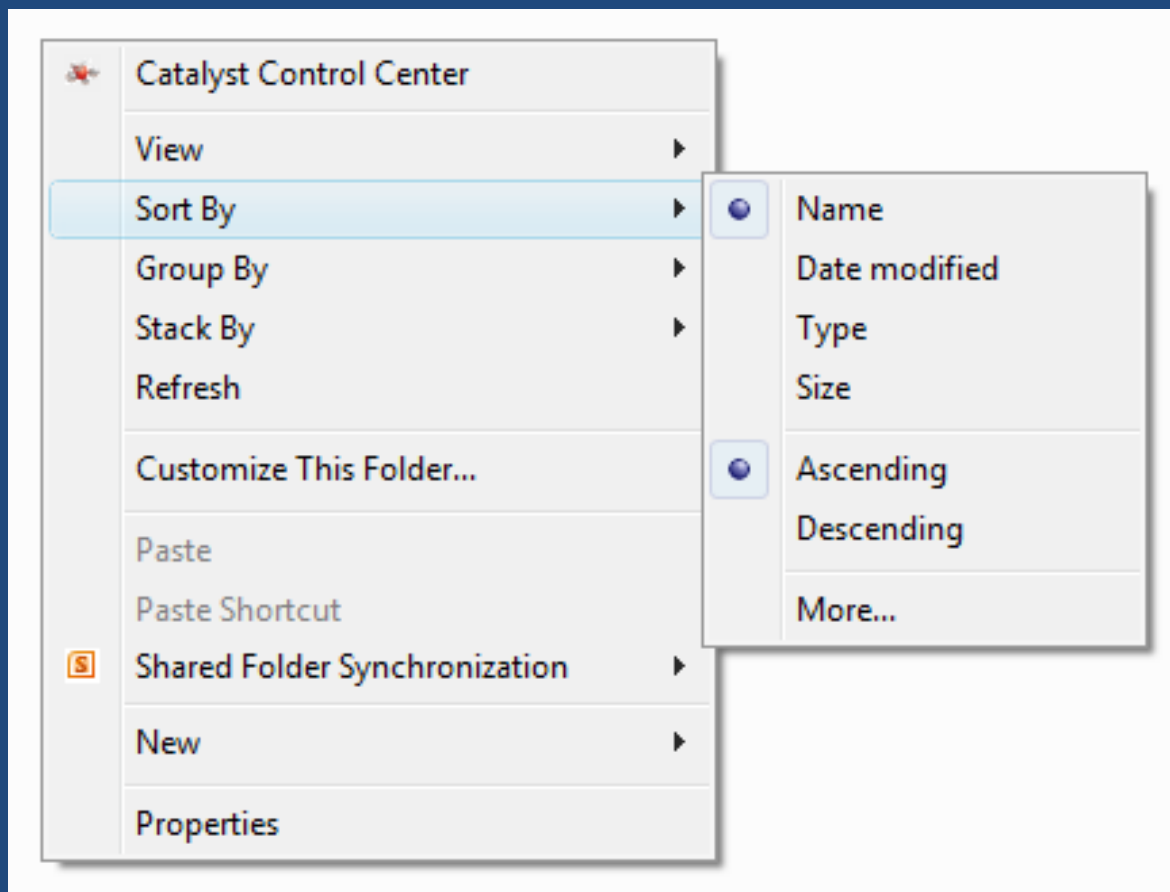


Windows file explorer





Sort By in Windows





Library: sort and search



Other Applications? 🤨

Introduction to Searching and sorting algorithms



Let's read it with each other!

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SearchingSortingStonyUni.pdf	added new extra slide	1 minute ago

Give feedback

Application of Programming in the Digital Age!



Your mid-term project





Lecture Resources

- <https://www.geeksforgeeks.org/difference-between-searching-and-sorting-algorithms/>
- <https://www.geeksforgeeks.org/searching-algorithms/>
- <https://realpython.com/build-recommendation-engine-collaborative-filtering/>