Theory of Algorithms VI

Conclusion

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• Basic methodologies:

- Basic methodologies:
 - Algorithms on Lists, Trees and Graphs

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 - Divide and Conquer

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 - · Randomized Algorithms
 - Computational Geometry
 - Algorithms on Data
 - ...

• Big-O Notation

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Sorting

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- Matchings in bipartite graphs
- Maximum flows in networks

- Link lists
- Trees, graphs
- Heaps

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- ordered binary decision diagrams (OBDD)

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Computational Complexity

Church-Turing Thesis

NP Problems

Computational Complexity

Church-Turing Thesis

NP Problems

Complexity Class

The Door of Algorithms will Open!