

Assessment

Assignment can be used to improve you grade

- ▶ If you obtain a bonus your grade will improve according to the following function

$$f(x) = \begin{cases} \frac{1}{10} \text{round} \left(10 \left(\frac{\text{round}(3x)-1}{3} \right) \right) & 1 < x \leq 4 \\ x & \text{otw.} \end{cases}$$

- ▶ It will improve by 0.3 or 0.4, respectively.

Examples:

- ▶ 3.3 → 3.0
- ▶ 2.0 → 1.7
- ▶ 3.7 → 3.3
- ▶ 1.0 → 1.0
- ▶ > 4.0 no improvement



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Requirements for Bonus

- ▶ 50% of the points are achieved on submissions 1-7,
- ▶ 50% of the points are achieved on submissions 8-13,
- ▶ each group member has written at least 4 solutions.






1 Contents

- ▶ Foundations
 - ▶ Machine models
 - ▶ Efficiency measures
 - ▶ Asymptotic notation
 - ▶ Recursion
- ▶ Higher Data Structures
 - ▶ Search trees
 - ▶ Hashing
 - ▶ Priority queues
 - ▶ Union/Find data structures
- ▶ Cuts/Flows
- ▶ Matchings



2 Literatur

-  Alfred V. Aho, John E. Hopcroft, Jeffrey D. Ullman:
The design and analysis of computer algorithms,
Addison-Wesley Publishing Company: Reading (MA), 1974
-  Thomas H. Cormen, Charles E. Leiserson, Ron L. Rivest,
Clifford Stein:
Introduction to algorithms,
McGraw-Hill, 1990
-  Michael T. Goodrich, Roberto Tamassia:
Algorithm design: Foundations, analysis, and internet examples,
John Wiley & Sons, 2002

