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CS2223 Algorithms

Q4

Ranked Functions by Increasing Order of Growth (higher on the list, the larger the order of growth):

12) $\frac{1}{n}$

11) $\log_2 n$

10) $12\sqrt{n}$ // 10 and 9 have the same order of complexity

9) $50n^{0.5}$

8) $n^{0.51}$

7) $2^{32}n$

6) $n \log_2 n$

5) $n^2 - 324$ // 5 and 4 have the same order of complexity

4) $100n^2 + 6n$

3) $2n^3$

2) 3^n

1) $n^{\log_2 n}$