

Text Book:  
Introduction to the Design and Analysis of Algorithms  
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2<sup>nd</sup> Edition

## Basic Efficiency Classes to represent time complexity

Class	Name	Example
1	constant	Best case for sequential search
$\log n$	logarithmic	Binary Search
$n$	linear	Worst case for sequential search
$n \log n$	$n$ -log- $n$	Mergesort
$n^2$	quadratic	Bubble Sort
$n^3$	cubic	Matrix Multiplication
$2^n$	exponential	Subset generation
$n!$	factorial	TSP using exhaustive search