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**Algorithms: Design and Analysis, Part 1**

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**I. INTRODUCTION (Week 1)**

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[PDF for Why Study Algorithms ? (4 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-intro1.pdf" \o "PDF" \t "_new)

[TYPED for Why Study Algorithms ? (4 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-intro1.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Why Study Algorithms ? (4 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=20_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Why Study Algorithms ? (4 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=20_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Why Study Algorithms ? (4 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=20" \o "Video (MP4)" \t "_new)

* Completed[Integer Multiplication (9 min)](https://class.coursera.org/algo-005/lecture/165)

[PDF for Integer Multiplication (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-intro2-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Integer Multiplication (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-intro2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Integer Multiplication (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=165_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Integer Multiplication (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=165_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Integer Multiplication (9 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=165" \o "Video (MP4)" \t "_new)

* Completed[Karatsuba Multiplication (13 min)](https://class.coursera.org/algo-005/lecture/167)

[PDF for Karatsuba Multiplication (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-intro3-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Karatsuba Multiplication (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-intro3_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Karatsuba Multiplication (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=167_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Karatsuba Multiplication (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=167_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Karatsuba Multiplication (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=167" \o "Video (MP4)" \t "_new)

* Completed[About the Course (17 min)](https://class.coursera.org/algo-005/lecture/21)

[PPT for About the Course (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-about-annotated.pptx" \o "PPT" \t "_new)

[PDF for About the Course (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-about-annotated.pdf" \o "PDF" \t "_new)

[TYPED for About the Course (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-about_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for About the Course (17 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=21_en&format=txt" \o "Subtitles (text)" \t "_new)

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[Video (MP4) for About the Course (17 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=21" \o "Video (MP4)" \t "_new)

* Completed[Merge Sort: Motivation and Example (9 min)](https://class.coursera.org/algo-005/lecture/1)

[PPT for Merge Sort: Motivation and Example (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge1-annotated.pptx" \o "PPT" \t "_new)

[PDF for Merge Sort: Motivation and Example (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge1.pdf" \o "PDF" \t "_new)

[TYPED for Merge Sort: Motivation and Example (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Merge Sort: Motivation and Example (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=1_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Merge Sort: Motivation and Example (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=1_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Merge Sort: Motivation and Example (9 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=1" \o "Video (MP4)" \t "_new)

* Completed[Merge Sort: Pseudocode (13 min)](https://class.coursera.org/algo-005/lecture/2)

[PPT for Merge Sort: Pseudocode (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge2-annotated.pptx" \o "PPT" \t "_new)

[PDF for Merge Sort: Pseudocode (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge2.pdf" \o "PDF" \t "_new)

[TYPED for Merge Sort: Pseudocode (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Merge Sort: Pseudocode (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=2_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Merge Sort: Pseudocode (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=2_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Merge Sort: Pseudocode (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=2" \o "Video (MP4)" \t "_new)

* Completed[Merge Sort: Analysis (9 min)](https://class.coursera.org/algo-005/lecture/3)

[PPT for Merge Sort: Analysis (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge3-annotated.pptx" \o "PPT" \t "_new)

[PDF for Merge Sort: Analysis (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge3.pdf" \o "PDF" \t "_new)

[TYPED for Merge Sort: Analysis (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-merge3_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Merge Sort: Analysis (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=3_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Merge Sort: Analysis (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=3_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Merge Sort: Analysis (9 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=3" \o "Video (MP4)" \t "_new)

* Completed[Guiding Principles for Analysis of Algorithms (15 min)](https://class.coursera.org/algo-005/lecture/4)

[PPT for Guiding Principles for Analysis of Algorithms (15 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-guiding-annotated-final.pptx" \o "PPT" \t "_new)

[PDF for Guiding Principles for Analysis of Algorithms (15 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-guiding.pdf" \o "PDF" \t "_new)

[TYPED for Guiding Principles for Analysis of Algorithms (15 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-guiding_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Guiding Principles for Analysis of Algorithms (15 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=4_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Guiding Principles for Analysis of Algorithms (15 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=4_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Guiding Principles for Analysis of Algorithms (15 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=4" \o "Video (MP4)" \t "_new)

**II. ASYMPTOTIC ANALYSIS (Week 1)**

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* Completed[The Gist (14 min)](https://class.coursera.org/algo-005/lecture/169)

[PDF for The Gist (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-aa-gist-annotated.pdf" \o "PDF" \t "_new)

[TYPED for The Gist (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo1-aa-gist_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for The Gist (14 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=169_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for The Gist (14 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=169_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for The Gist (14 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=169" \o "Video (MP4)" \t "_new)

* Completed[Big-Oh Notation (4 min)](https://class.coursera.org/algo-005/lecture/11)

[PPT for Big-Oh Notation (4 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic1.pptx" \o "PPT" \t "_new)

[PDF for Big-Oh Notation (4 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic1.pdf" \o "PDF" \t "_new)

[TYPED for Big-Oh Notation (4 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Big-Oh Notation (4 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=11_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Big-Oh Notation (4 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=11_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Big-Oh Notation (4 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=11" \o "Video (MP4)" \t "_new)

* Completed[Basic Examples (7 min)](https://class.coursera.org/algo-005/lecture/12)

[PPT for Basic Examples (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic2.pptx" \o "PPT" \t "_new)

[PDF for Basic Examples (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic2.pdf" \o "PDF" \t "_new)

[TYPED for Basic Examples (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Basic Examples (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=12_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Basic Examples (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=12_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Basic Examples (7 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=12" \o "Video (MP4)" \t "_new)

* Completed[Big Omega and Theta (7 min)](https://class.coursera.org/algo-005/lecture/13)

[PPT for Big Omega and Theta (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic3-annotated.pptx" \o "PPT" \t "_new)

[PDF for Big Omega and Theta (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic3.pdf" \o "PDF" \t "_new)

[TYPED for Big Omega and Theta (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic3_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Big Omega and Theta (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=13_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Big Omega and Theta (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=13_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Big Omega and Theta (7 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=13" \o "Video (MP4)" \t "_new)

* Completed[Additional Examples [Review - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/14)

[PPT for Additional Examples [Review - Optional] (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic4.pptx" \o "PPT" \t "_new)

[PDF for Additional Examples [Review - Optional] (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic4.pdf" \o "PDF" \t "_new)

[TYPED for Additional Examples [Review - Optional] (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-asymptotic4_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Additional Examples [Review - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=14_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Additional Examples [Review - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=14_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Additional Examples [Review - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=14" \o "Video (MP4)" \t "_new)

**III. DIVIDE & CONQUER ALGORITHMS (Week 1)**

(expanded, click to collapse)

* Completed[O(n log n) Algorithm for Counting Inversions I (13 min)](https://class.coursera.org/algo-005/lecture/15)

[PPT for O(n log n) Algorithm for Counting Inversions I (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-inversions1.pptx" \o "PPT" \t "_new)

[PDF for O(n log n) Algorithm for Counting Inversions I (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-inversions1.pdf" \o "PDF" \t "_new)

[TYPED for O(n log n) Algorithm for Counting Inversions I (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-inversions1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for O(n log n) Algorithm for Counting Inversions I (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=15_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for O(n log n) Algorithm for Counting Inversions I (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=15_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for O(n log n) Algorithm for Counting Inversions I (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=15" \o "Video (MP4)" \t "_new)

* Completed[O(n log n) Algorithm for Counting Inversions II (17 min)](https://class.coursera.org/algo-005/lecture/16)

[PPT for O(n log n) Algorithm for Counting Inversions II (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-inversions2.pptx" \o "PPT" \t "_new)

[PDF for O(n log n) Algorithm for Counting Inversions II (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-inversions2.pdf" \o "PDF" \t "_new)

[TYPED for O(n log n) Algorithm for Counting Inversions II (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-inversions2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for O(n log n) Algorithm for Counting Inversions II (17 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=16_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for O(n log n) Algorithm for Counting Inversions II (17 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=16_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for O(n log n) Algorithm for Counting Inversions II (17 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=16" \o "Video (MP4)" \t "_new)

* Completed[Strassen's Subcubic Matrix Multiplication Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/19)

[PPT for Strassen's Subcubic Matrix Multiplication Algorithm (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-strassen.pptx" \o "PPT" \t "_new)

[PDF for Strassen's Subcubic Matrix Multiplication Algorithm (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-strassen.pdf" \o "PDF" \t "_new)

[TYPED for Strassen's Subcubic Matrix Multiplication Algorithm (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-strassen_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Strassen's Subcubic Matrix Multiplication Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=19_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Strassen's Subcubic Matrix Multiplication Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=19_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Strassen's Subcubic Matrix Multiplication Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=19" \o "Video (MP4)" \t "_new)

* Completed[O(n log n) Algorithm for Closest Pair I [Advanced - Optional] (32 min)](https://class.coursera.org/algo-005/lecture/17)

[PPT for O(n log n) Algorithm for Closest Pair I [Advanced - Optional] (32 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-closest1-annotated-final.pptx" \o "PPT" \t "_new)

[PDF for O(n log n) Algorithm for Closest Pair I [Advanced - Optional] (32 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-closest1.pdf" \o "PDF" \t "_new)

[TYPED for O(n log n) Algorithm for Closest Pair I [Advanced - Optional] (32 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-closest1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for O(n log n) Algorithm for Closest Pair I [Advanced - Optional] (32 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=17_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for O(n log n) Algorithm for Closest Pair I [Advanced - Optional] (32 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=17_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for O(n log n) Algorithm for Closest Pair I [Advanced - Optional] (32 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=17" \o "Video (MP4)" \t "_new)

* Completed[O(n log n) Algorithm for Closest Pair II [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/18)

[PPT for O(n log n) Algorithm for Closest Pair II [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-closest2-annotated-final.pptx" \o "PPT" \t "_new)

[PDF for O(n log n) Algorithm for Closest Pair II [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-closest2.pdf" \o "PDF" \t "_new)

[TYPED for O(n log n) Algorithm for Closest Pair II [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-closest2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for O(n log n) Algorithm for Closest Pair II [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=18_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for O(n log n) Algorithm for Closest Pair II [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=18_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for O(n log n) Algorithm for Closest Pair II [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=18" \o "Video (MP4)" \t "_new)

**IV. THE MASTER METHOD (Week 2)**

(expanded, click to collapse)

* Completed[Motivation (8 min)](https://class.coursera.org/algo-005/lecture/5)

[PPT for Motivation (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master1.pptx" \o "PPT" \t "_new)

[PDF for Motivation (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master1.pdf" \o "PDF" \t "_new)

[TYPED for Motivation (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Motivation (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=5_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Motivation (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=5_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Motivation (8 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=5" \o "Video (MP4)" \t "_new)

* Completed[Formal Statement (10 min)](https://class.coursera.org/algo-005/lecture/6)

[PPT for Formal Statement (10 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master2-annotated.pptx" \o "PPT" \t "_new)

[PDF for Formal Statement (10 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master2.pdf" \o "PDF" \t "_new)

[TYPED for Formal Statement (10 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Formal Statement (10 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=6_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Formal Statement (10 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=6_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Formal Statement (10 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=6" \o "Video (MP4)" \t "_new)

* Completed[Examples (13 min)](https://class.coursera.org/algo-005/lecture/7)

[PPT for Examples (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master3.pptx" \o "PPT" \t "_new)

[PDF for Examples (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master3.pdf" \o "PDF" \t "_new)

[TYPED for Examples (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master3_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Examples (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=7_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Examples (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=7_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Examples (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=7" \o "Video (MP4)" \t "_new)

* Completed[Proof I (10 min)](https://class.coursera.org/algo-005/lecture/8)

[PPT for Proof I (10 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master4.pptx" \o "PPT" \t "_new)

[PDF for Proof I (10 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master4.pdf" \o "PDF" \t "_new)

[TYPED for Proof I (10 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master4_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Proof I (10 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=8_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Proof I (10 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=8_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Proof I (10 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=8" \o "Video (MP4)" \t "_new)

* Completed[Interpretation of the 3 Cases (11 min)](https://class.coursera.org/algo-005/lecture/9)

[PPT for Interpretation of the 3 Cases (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master5-annotated.pptx" \o "PPT" \t "_new)

[PDF for Interpretation of the 3 Cases (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master5.pdf" \o "PDF" \t "_new)

[TYPED for Interpretation of the 3 Cases (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master5_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Interpretation of the 3 Cases (11 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=9_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Interpretation of the 3 Cases (11 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=9_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Interpretation of the 3 Cases (11 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=9" \o "Video (MP4)" \t "_new)

* Completed[Proof II (16 min)](https://class.coursera.org/algo-005/lecture/10)

[PPT for Proof II (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master6.pptx" \o "PPT" \t "_new)

[PDF for Proof II (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master6.pdf" \o "PDF" \t "_new)

[TYPED for Proof II (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-master6_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Proof II (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=10_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Proof II (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=10_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Proof II (16 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=10" \o "Video (MP4)" \t "_new)

**V. QUICKSORT - ALGORITHM (Week 2)**

(expanded, click to collapse)

* Completed[Quicksort: Overview (12 min)](https://class.coursera.org/algo-005/lecture/23)

[PPT for Quicksort: Overview (12 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-intro-annotated.pptx" \o "PPT" \t "_new)

[PDF for Quicksort: Overview (12 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-intro-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Quicksort: Overview (12 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-intro_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Quicksort: Overview (12 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=23_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Quicksort: Overview (12 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=23_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Quicksort: Overview (12 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=23" \o "Video (MP4)" \t "_new)

* Completed[Partitioning Around a Pivot (25 min)](https://class.coursera.org/algo-005/lecture/22)

[PPT for Partitioning Around a Pivot (25 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-partition-annotated.pptx" \o "PPT" \t "_new)

[PDF for Partitioning Around a Pivot (25 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-partition-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Partitioning Around a Pivot (25 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-partition_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Partitioning Around a Pivot (25 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=22_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Partitioning Around a Pivot (25 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=22_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Partitioning Around a Pivot (25 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=22" \o "Video (MP4)" \t "_new)

* Completed[Correctness of Quicksort [Review - Optional] (11 min)](https://class.coursera.org/algo-005/lecture/24)

[PPT for Correctness of Quicksort [Review - Optional] (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-correctness-annotated.pptx" \o "PPT" \t "_new)

[PDF for Correctness of Quicksort [Review - Optional] (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-correctness-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Correctness of Quicksort [Review - Optional] (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-correctness_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Correctness of Quicksort [Review - Optional] (11 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=24_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Correctness of Quicksort [Review - Optional] (11 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=24_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Correctness of Quicksort [Review - Optional] (11 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=24" \o "Video (MP4)" \t "_new)

* Completed[Choosing a Good Pivot (22min)](https://class.coursera.org/algo-005/lecture/25)

[PPT for Choosing a Good Pivot (22min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-pivot-annotated.pptx" \o "PPT" \t "_new)

[PDF for Choosing a Good Pivot (22min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-pivot-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Choosing a Good Pivot (22min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-pivot_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Choosing a Good Pivot (22min)](https://class.coursera.org/algo-005/lecture/subtitles?q=25_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Choosing a Good Pivot (22min)](https://class.coursera.org/algo-005/lecture/subtitles?q=25_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Choosing a Good Pivot (22min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=25" \o "Video (MP4)" \t "_new)

**VI. QUICKSORT - ANALYSIS (Week 2)**

(expanded, click to collapse)

* Completed[Analysis I: A Decomposition Principle [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/26)

[PPT for Analysis I: A Decomposition Principle [Advanced - Optional] (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis1-annotated.pptx" \o "PPT" \t "_new)

[PDF for Analysis I: A Decomposition Principle [Advanced - Optional] (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis1-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Analysis I: A Decomposition Principle [Advanced - Optional] (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Analysis I: A Decomposition Principle [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=26_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Analysis I: A Decomposition Principle [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=26_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Analysis I: A Decomposition Principle [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=26" \o "Video (MP4)" \t "_new)

* Completed[Analysis II: The Key Insight [Advanced - Optional] (12min)](https://class.coursera.org/algo-005/lecture/27)

[PPT for Analysis II: The Key Insight [Advanced - Optional] (12min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis2-annotated.pptx" \o "PPT" \t "_new)

[PDF for Analysis II: The Key Insight [Advanced - Optional] (12min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis2-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Analysis II: The Key Insight [Advanced - Optional] (12min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Analysis II: The Key Insight [Advanced - Optional] (12min)](https://class.coursera.org/algo-005/lecture/subtitles?q=27_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Analysis II: The Key Insight [Advanced - Optional] (12min)](https://class.coursera.org/algo-005/lecture/subtitles?q=27_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Analysis II: The Key Insight [Advanced - Optional] (12min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=27" \o "Video (MP4)" \t "_new)

* Completed[Analysis III: Final Calculations [Advanced - Optional] (9min)](https://class.coursera.org/algo-005/lecture/28)

[PPT for Analysis III: Final Calculations [Advanced - Optional] (9min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis3-annotated.pptx" \o "PPT" \t "_new)

[PDF for Analysis III: Final Calculations [Advanced - Optional] (9min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis3-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Analysis III: Final Calculations [Advanced - Optional] (9min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-qsort-analysis3_typed.pdf" \o "TYPED" \t "_new)

[NOTES for Analysis III: Final Calculations [Advanced - Optional] (9min)](https://d396qusza40orc.cloudfront.net/algo1/notes/qsort.pdf" \o "NOTES" \t "_new)

[Subtitles (text) for Analysis III: Final Calculations [Advanced - Optional] (9min)](https://class.coursera.org/algo-005/lecture/subtitles?q=28_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Analysis III: Final Calculations [Advanced - Optional] (9min)](https://class.coursera.org/algo-005/lecture/subtitles?q=28_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Analysis III: Final Calculations [Advanced - Optional] (9min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=28" \o "Video (MP4)" \t "_new)

**VII. PROBABILITY REVIEW (Weeks 2-3)**

(expanded, click to collapse)

* Completed[Part I [Review - Optional] (25 min)](https://class.coursera.org/algo-005/lecture/29)

[PPT for Part I [Review - Optional] (25 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-prob_review1-annotated.pptx" \o "PPT" \t "_new)

[PDF for Part I [Review - Optional] (25 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-prob_review1-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Part I [Review - Optional] (25 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-prob_review1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Part I [Review - Optional] (25 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=29_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Part I [Review - Optional] (25 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=29_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Part I [Review - Optional] (25 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=29" \o "Video (MP4)" \t "_new)

* Completed[Part II [Review - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/30)

[PPT for Part II [Review - Optional] (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-prob_review2-annotated.pptx" \o "PPT" \t "_new)

[PDF for Part II [Review - Optional] (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-prob_review2-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Part II [Review - Optional] (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-prob_review2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Part II [Review - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=30_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Part II [Review - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=30_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Part II [Review - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=30" \o "Video (MP4)" \t "_new)

**VIII. LINEAR-TIME SELECTION (Week 3)**

(expanded, click to collapse)

* Completed[Randomized Selection - Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/36)

[PPT for Randomized Selection - Algorithm (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-ralgorithm-annotated.pptx" \o "PPT" \t "_new)

[PDF for Randomized Selection - Algorithm (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-ralgorithm-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Randomized Selection - Algorithm (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-ralgorithm_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Randomized Selection - Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=36_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Randomized Selection - Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=36_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Randomized Selection - Algorithm (22 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=36" \o "Video (MP4)" \t "_new)

* Completed[Randomized Selection - Analysis (21 min)](https://class.coursera.org/algo-005/lecture/37)

[PPT for Randomized Selection - Analysis (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-ranalysis-annotated.pptx" \o "PPT" \t "_new)

[PDF for Randomized Selection - Analysis (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-ranalysis-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Randomized Selection - Analysis (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-ranalysis_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Randomized Selection - Analysis (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=37_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Randomized Selection - Analysis (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=37_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Randomized Selection - Analysis (21 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=37" \o "Video (MP4)" \t "_new)

* Completed[Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/38)

[PPT for Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-dalgorithm.pptx" \o "PPT" \t "_new)

[PDF for Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-dalgorithm.pdf" \o "PDF" \t "_new)

[TYPED for Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-dalgorithm_typed.pdf" \o "TYPED" \t "_new)

[NOTES for Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://d396qusza40orc.cloudfront.net/algo1/notes/median.pdf" \o "NOTES" \t "_new)

[Subtitles (text) for Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=38_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=38_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Deterministic Selection - Algorithm [Advanced - Optional] (17 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=38" \o "Video (MP4)" \t "_new)

* Completed[Deterministic Selection - Analysis I [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/39)

[PPT for Deterministic Selection - Analysis I [Advanced - Optional] (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-danalysis.pptx" \o "PPT" \t "_new)

[PDF for Deterministic Selection - Analysis I [Advanced - Optional] (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-danalysis.pdf" \o "PDF" \t "_new)

[TYPED for Deterministic Selection - Analysis I [Advanced - Optional] (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-danalysis_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Deterministic Selection - Analysis I [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=39_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Deterministic Selection - Analysis I [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=39_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Deterministic Selection - Analysis I [Advanced - Optional] (22 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=39" \o "Video (MP4)" \t "_new)

* Completed[Deterministic Selection - Analysis II [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/41)

[PPT for Deterministic Selection - Analysis II [Advanced - Optional] (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-dalgorithmanalysis-annotated.pptx" \o "PPT " \t "_new)

[PDF for Deterministic Selection - Analysis II [Advanced - Optional] (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-dalgorithmanalysis-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Deterministic Selection - Analysis II [Advanced - Optional] (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-danalysis2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Deterministic Selection - Analysis II [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=41_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Deterministic Selection - Analysis II [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=41_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Deterministic Selection - Analysis II [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=41" \o "Video (MP4)" \t "_new)

* Completed[Omega(n log n) Lower Bound for Comparison-Based Sorting [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/40)

[PPT for Omega(n log n) Lower Bound for Comparison-Based Sorting [Advanced - Optional] (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-sortinglb-annotated.pptx" \o "PPT" \t "_new)

[PDF for Omega(n log n) Lower Bound for Comparison-Based Sorting [Advanced - Optional] (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-sortinglb-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Omega(n log n) Lower Bound for Comparison-Based Sorting [Advanced - Optional] (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-select-sortinglb_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Omega(n log n) Lower Bound for Comparison-Based Sorting [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=40_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Omega(n log n) Lower Bound for Comparison-Based Sorting [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=40_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Omega(n log n) Lower Bound for Comparison-Based Sorting [Advanced - Optional] (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=40" \o "Video (MP4)" \t "_new)

**IX. GRAPHS AND THE CONTRACTION ALGORITHM (Week 3)**

(expanded, click to collapse)

* Completed[Graphs and Minimum Cuts (16 min)](https://class.coursera.org/algo-005/lecture/31)

[PPT for Graphs and Minimum Cuts (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-overview-annotated.pptx" \o "PPT" \t "_new)

[PDF for Graphs and Minimum Cuts (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-overview-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Graphs and Minimum Cuts (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-overview_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Graphs and Minimum Cuts (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=31_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Graphs and Minimum Cuts (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=31_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Graphs and Minimum Cuts (16 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=31" \o "Video (MP4)" \t "_new)

* Completed[Graph Representations (14 min)](https://class.coursera.org/algo-005/lecture/32)

[PPT for Graph Representations (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-representations-annotated.pptx" \o "PPT" \t "_new)

[PDF for Graph Representations (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-representations-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Graph Representations (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-representations_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Graph Representations (14 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=32_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Graph Representations (14 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=32_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Graph Representations (14 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=32" \o "Video (MP4)" \t "_new)

* Completed[Random Contraction Algorithm (9 min)](https://class.coursera.org/algo-005/lecture/33)

[PPT for Random Contraction Algorithm (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-algorithm-annotated.pptx" \o "PPT" \t "_new)

[PDF for Random Contraction Algorithm (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-algorithm-annotated.pdf" \o "PDF" \t "_new)

[TYPED ffor Random Contraction Algorithm (9 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-algorithm_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Random Contraction Algorithm (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=33_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Random Contraction Algorithm (9 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=33_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Random Contraction Algorithm (9 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=33" \o "Video (MP4)" \t "_new)

* Completed[Analysis of Contraction Algorithm (30 min)](https://class.coursera.org/algo-005/lecture/35)

[PPT for Analysis of Contraction Algorithm (30 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-analysis-annotated.pptx" \o "PPT" \t "_new)

[PDF for Analysis of Contraction Algorithm (30 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-analysis-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Analysis of Contraction Algorithm (30 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-analysis_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Analysis of Contraction Algorithm (30 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=35_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Analysis of Contraction Algorithm (30 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=35_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Analysis of Contraction Algorithm (30 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=35" \o "Video (MP4)" \t "_new)

* Completed[Counting Minimum Cuts (7 min)](https://class.coursera.org/algo-005/lecture/34)

[PPT for Counting Minimum Cuts (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-counting-annotated.pptx" \o "PPT" \t "_new)

[PDF for Counting Minimum Cuts (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-counting-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Counting Minimum Cuts (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-karger-counting_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Counting Minimum Cuts (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=34_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Counting Minimum Cuts (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=34_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Counting Minimum Cuts (7 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=34" \o "Video (MP4)" \t "_new)

**X. GRAPH SEARCH AND CONNECTIVITY (Week 4)**

(expanded, click to collapse)

* Completed[Graph Search - Overview (23 min)](https://class.coursera.org/algo-005/lecture/55)

[PPT for Graph Search - Overview (23 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-search.pptx" \o "PPT" \t "_new)

[PDF for Graph Search - Overview (23 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-search.pdf" \o "PDF" \t "_new)

[TYPED for Graph Search - Overview (23 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-search_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Graph Search - Overview (23 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=55_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Graph Search - Overview (23 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=55_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Graph Search - Overview (23 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=55" \o "Video (MP4)" \t "_new)

* Completed[Breadth-First Search (BFS): The Basics (14 min)](https://class.coursera.org/algo-005/lecture/48)

[PPT for Breadth-First Search (BFS): The Basics (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs.pptx" \o "PPT" \t "_new)

[PDF for Breadth-First Search (BFS): The Basics (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs.pdf" \o "PDF" \t "_new)

[TYPED for Breadth-First Search (BFS): The Basics (14 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Breadth-First Search (BFS): The Basics (14 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=48_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Breadth-First Search (BFS): The Basics (14 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=48_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Breadth-First Search (BFS): The Basics (14 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=48" \o "Video (MP4)" \t "_new)

* Completed[BFS and Shortest Paths (8 min)](https://class.coursera.org/algo-005/lecture/49)

[PPT for BFS and Shortest Paths (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs.pptx" \o "PPT" \t "_new)

[PDF for BFS and Shortest Paths (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs.pdf" \o "PDF" \t "_new)

[TYPED for BFS and Shortest Paths (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for BFS and Shortest Paths (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=49_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for BFS and Shortest Paths (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=49_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for BFS and Shortest Paths (8 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=49" \o "Video (MP4)" \t "_new)

* Completed[BFS and Undirected Connectivity (13 min)](https://class.coursera.org/algo-005/lecture/50)

[PPT for BFS and Undirected Connectivity (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs.pptx" \o "PPT" \t "_new)

[PDF for BFS and Undirected Connectivity (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs.pdf" \o "PDF" \t "_new)

[TYPED for BFS and Undirected Connectivity (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-bfs_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for BFS and Undirected Connectivity (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=50_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for BFS and Undirected Connectivity (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=50_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for BFS and Undirected Connectivity (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=50" \o "Video (MP4)" \t "_new)

* Completed[Depth-First Search (DFS): The Basics (7 min)](https://class.coursera.org/algo-005/lecture/51)

[PPT for Depth-First Search (DFS): The Basics (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-dfs-annotated.pptx" \o "PPT" \t "_new)

[PDF for Depth-First Search (DFS): The Basics (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-dfs-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Depth-First Search (DFS): The Basics (7 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-dfs_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Depth-First Search (DFS): The Basics (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=51_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Depth-First Search (DFS): The Basics (7 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=51_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Depth-First Search (DFS): The Basics (7 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=51" \o "Video (MP4)" \t "_new)

* Completed[Topological Sort (22 min)](https://class.coursera.org/algo-005/lecture/52)

[PPT for Topological Sort (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-dfs-annotated.pptx" \o "PPT" \t "_new)

[PDF for Topological Sort (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-dfs-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Topological Sort (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-dfs_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Topological Sort (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=52_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Topological Sort (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=52_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Topological Sort (22 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=52" \o "Video (MP4)" \t "_new)

* Completed[Computing Strong Components: The Algorithm (29 min)](https://class.coursera.org/algo-005/lecture/53)

[PPT for Computing Strong Components: The Algorithm (29 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-scc.pptx" \o "PPT" \t "_new)

[PDF for Computing Strong Components: The Algorithm (29 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-scc.pdf" \o "PDF" \t "_new)

[TYPED for Computing Strong Components: The Algorithm (29 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-scc_typed.pdf" \o "TYPED" \t "_new)

[NOTES for Computing Strong Components: The Algorithm (29 min)](https://d396qusza40orc.cloudfront.net/algo1/notes/scc.pdf" \o "NOTES" \t "_new)

[Subtitles (text) for Computing Strong Components: The Algorithm (29 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=53_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Computing Strong Components: The Algorithm (29 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=53_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Computing Strong Components: The Algorithm (29 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=53" \o "Video (MP4)" \t "_new)

* Completed[Computing Strong Components: The Analysis (26 min)](https://class.coursera.org/algo-005/lecture/54)

[PPT for Computing Strong Components: The Analysis (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-sccanalysis.pptx" \o "PPT" \t "_new)

[PDF for Computing Strong Components: The Analysis (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-sccanalysis.pdf" \o "PDF" \t "_new)

[TYPED for Computing Strong Components: The Analysis (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-sccanalysis_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Computing Strong Components: The Analysis (26 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=54_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Computing Strong Components: The Analysis (26 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=54_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Computing Strong Components: The Analysis (26 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=54" \o "Video (MP4)" \t "_new)

* Completed[Structure of the Web [Optional] (19 min)](https://class.coursera.org/algo-005/lecture/56)

[PPT for Structure of the Web [Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-web-annotated.pptx" \o "PPT" \t "_new)

[PDF for Structure of the Web [Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-web-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Structure of the Web [Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-graphs-web_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Structure of the Web [Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=56_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Structure of the Web [Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=56_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Structure of the Web [Optional] (19 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=56" \o "Video (MP4)" \t "_new)

**XI. DIJKSTRA'S SHORTEST-PATH ALGORITHM (Week 5)**

(expanded, click to collapse)

* Completed[Dijkstra's Shortest-Path Algorithm (21 min)](https://class.coursera.org/algo-005/lecture/57)

[PPT for Dijkstra's Shortest-Path Algorithm (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-basics-annotated.pptx" \o "PPT" \t "_new)

[PDF for Dijkstra's Shortest-Path Algorithm (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-basics-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Dijkstra's Shortest-Path Algorithm (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-basics_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Dijkstra's Shortest-Path Algorithm (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=57_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Dijkstra's Shortest-Path Algorithm (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=57_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Dijkstra's Shortest-Path Algorithm (21 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=57" \o "Video (MP4)" \t "_new)

* Completed[Dijkstra's Algorithm: Examples (13 min)](https://class.coursera.org/algo-005/lecture/59)

[PPT for Dijkstra's Algorithm: Examples (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-basics-annotated.pptx" \o "PPT" \t "_new)

[PDF for Dijkstra's Algorithm: Examples (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-basics-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Dijkstra's Algorithm: Examples (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-basics_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Dijkstra's Algorithm: Examples (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=59_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Dijkstra's Algorithm: Examples (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=59_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Dijkstra's Algorithm: Examples (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=59" \o "Video (MP4)" \t "_new)

* Completed[Correctness of Dijkstra's Algorithm [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/58)

[PPT for Correctness of Dijkstra's Algorithm [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-correctness-annotated.pptx" \o "PPT" \t "_new)

[PDF for Correctness of Dijkstra's Algorithm [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-correctness-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Correctness of Dijkstra's Algorithm [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-correctness_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Correctness of Dijkstra's Algorithm [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=58_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Correctness of Dijkstra's Algorithm [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=58_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Correctness of Dijkstra's Algorithm [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=58" \o "Video (MP4)" \t "_new)

* Completed[Dijkstra's Algorithm: Implementation and Running Time (26 min)](https://class.coursera.org/algo-005/lecture/60)

[PPT for Dijkstra's Algorithm: Implementation and Running Time (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-runtime-annotated.pptx" \o "PPT" \t "_new)

[PDF for Dijkstra's Algorithm: Implementation and Running Time (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-runtime-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Dijkstra's Algorithm: Implementation and Running Time (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-dijkstra-runtime_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Dijkstra's Algorithm: Implementation and Running Time (26 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=60_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Dijkstra's Algorithm: Implementation and Running Time (26 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=60_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Dijkstra's Algorithm: Implementation and Running Time (26 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=60" \o "Video (MP4)" \t "_new)

**XII. HEAPS (Week 5)**

(expanded, click to collapse)

* Completed[Data Structures: Overview (5 min)](https://class.coursera.org/algo-005/lecture/61)

[PPT for Data Structures: Overview (5 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-overview-annotated.pptx" \o "PPT" \t "_new)

[PDF for Data Structures: Overview (5 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-overview-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Data Structures: Overview (5 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-overview_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Data Structures: Overview (5 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=61_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Data Structures: Overview (5 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=61_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Data Structures: Overview (5 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=61" \o "Video (MP4)" \t "_new)

* Completed[Heaps: Operations and Applications (18 min)](https://class.coursera.org/algo-005/lecture/62)

[PPT for Heaps: Operations and Applications (18 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-heaps-basics-annotated.pptx" \o "PPT" \t "_new)

[PDF for Heaps: Operations and Applications (18 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-heaps-basics-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Heaps: Operations and Applications (18 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-heaps-basics_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Heaps: Operations and Applications (18 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=62_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Heaps: Operations and Applications (18 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=62_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Heaps: Operations and Applications (18 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=62" \o "Video (MP4)" \t "_new)

* Completed[Heaps: Implementation Details [Advanced - Optional] (21 min)](https://class.coursera.org/algo-005/lecture/63)

[PPT for Heaps: Implementation Details [Advanced - Optional] (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-heaps-guts-annotated.pptx" \o "PPT" \t "_new)

[PDF for Heaps: Implementation Details [Advanced - Optional] (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-heaps-guts-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Heaps: Implementation Details [Advanced - Optional] (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-heaps-guts_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Heaps: Implementation Details [Advanced - Optional] (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=63_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Heaps: Implementation Details [Advanced - Optional] (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=63_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Heaps: Implementation Details [Advanced - Optional] (21 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=63" \o "Video (MP4)" \t "_new)

**XIII. BALANCED BINARY SEARCH TREES (Week 5)**

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* Completed[Balanced Search Trees: Operations and Applications (11 min)](https://class.coursera.org/algo-005/lecture/73)

[PPT for Balanced Search Trees: Operations and Applications (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-ops-annotated.pptx" \o "PPT" \t "_new)

[PDF for Balanced Search Trees: Operations and Applications (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-ops-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Balanced Search Trees: Operations and Applications (11 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-ops-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Balanced Search Trees: Operations and Applications (11 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=73_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Balanced Search Trees: Operations and Applications (11 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=73_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Balanced Search Trees: Operations and Applications (11 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=73" \o "Video (MP4)" \t "_new)

* Completed[Binary Search Tree Basics, Part I (13 min)](https://class.coursera.org/algo-005/lecture/74)

[PPT for Binary Search Tree Basics, Part I (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-basics-annotated.pptx" \o "PPT" \t "_new)

[PDF for Binary Search Tree Basics, Part I (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-basics-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Binary Search Tree Basics, Part I (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-basics-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Binary Search Tree Basics, Part I (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=74_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Binary Search Tree Basics, Part I (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=74_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Binary Search Tree Basics, Part I (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=74" \o "Video (MP4)" \t "_new)

* Completed[Binary Search Tree Basics, Part II (30 min)](https://class.coursera.org/algo-005/lecture/75)

[PPT for Binary Search Tree Basics, Part II (30 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-basics-annotated.pptx" \o "PPT" \t "_new)

[PDF for Binary Search Tree Basics, Part II (30 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-basics-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Binary Search Tree Basics, Part II (30 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-basics-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Binary Search Tree Basics, Part II (30 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=75_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Binary Search Tree Basics, Part II (30 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=75_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Binary Search Tree Basics, Part II (30 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=75" \o "Video (MP4)" \t "_new)

* Completed[Red-Black Trees (21 min)](https://class.coursera.org/algo-005/lecture/76)

[PPT for Red-Black Trees (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-redblack-annotated.pptx" \o "PPT" \t "_new)

[PDF for Red-Black Trees (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-redblack-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Red-Black Trees (21 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-redblack-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Red-Black Trees (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=76_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Red-Black Trees (21 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=76_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Red-Black Trees (21 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=76" \o "Video (MP4)" \t "_new)

* Completed[Rotations [Advanced - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/147)

[PDF for Rotations [Advanced - Optional] (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-rotations-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Rotations [Advanced - Optional] (8 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/redblack1_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Rotations [Advanced - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=147_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Rotations [Advanced - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=147_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Rotations [Advanced - Optional] (8 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=147" \o "Video (MP4)" \t "_new)

* Completed[Insertion in a Red-Black Tree [Advanced] (15 min)](https://class.coursera.org/algo-005/lecture/149)

[PDF for Insertion in a Red-Black Tree [Advanced] (15 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-trees-rbinsert-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Insertion in a Red-Black Tree [Advanced] (15 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/redblack2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Insertion in a Red-Black Tree [Advanced] (15 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=149_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Insertion in a Red-Black Tree [Advanced] (15 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=149_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Insertion in a Red-Black Tree [Advanced] (15 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=149" \o "Video (MP4)" \t "_new)

**XIV. HASHING: THE BASICS (Week 6)**

(expanded, click to collapse)

* Completed[Hash Tables: Operations and Applications (19 min)](https://class.coursera.org/algo-005/lecture/64)

[PPT for Hash Tables: Operations and Applications (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-basics-annotated.pptx" \o "PPT" \t "_new)

[PDF for Hash Tables: Operations and Applications (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-basics-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Hash Tables: Operations and Applications (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-basics_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Hash Tables: Operations and Applications (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=64_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Hash Tables: Operations and Applications (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=64_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Hash Tables: Operations and Applications (19 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=64" \o "Video (MP4)" \t "_new)

* Completed[Hash Tables: Implementation Details, Part I (19 min)](https://class.coursera.org/algo-005/lecture/65)

[PPT for Hash Tables: Implementation Details, Part I (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-guts-annotated.pptx" \o "PPT" \t "_new)

[PDF for Hash Tables: Implementation Details, Part I (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-guts-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Hash Tables: Implementation Details, Part I (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-guts_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Hash Tables: Implementation Details, Part I (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=65_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Hash Tables: Implementation Details, Part I (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=65_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Hash Tables: Implementation Details, Part I (19 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=65" \o "Video (MP4)" \t "_new)

* Completed[Hash Tables: Implementation Details, Part II (22 min)](https://class.coursera.org/algo-005/lecture/66)

[PPT for Hash Tables: Implementation Details, Part II (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-guts-annotated.pptx" \o "PPT" \t "_new)

[PDF for Hash Tables: Implementation Details, Part II (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-guts-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Hash Tables: Implementation Details, Part II (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-guts_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Hash Tables: Implementation Details, Part II (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=66_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Hash Tables: Implementation Details, Part II (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=66_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Hash Tables: Implementation Details, Part II (22 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=66" \o "Video (MP4)" \t "_new)

**XV. UNIVERSAL HASHING (Week 6)**

(expanded, click to collapse)

* Completed[Pathological Data Sets and Universal Hashing Motivation (22 min)](https://class.coursera.org/algo-005/lecture/67)

[PPT for Pathological Data Sets and Universal Hashing Motivation (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal-1.pptx" \o "PPT" \t "_new)

[PDF for Pathological Data Sets and Universal Hashing Motivation (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal-1.pdf" \o "PDF" \t "_new)

[TYPED for Pathological Data Sets and Universal Hashing Motivation (22 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal1-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Pathological Data Sets and Universal Hashing Motivation (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=67_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Pathological Data Sets and Universal Hashing Motivation (22 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=67_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Pathological Data Sets and Universal Hashing Motivation (22 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=67" \o "Video (MP4)" \t "_new)

* [Universal Hashing: Definition and Example [Advanced - Optional] (26 min)](https://class.coursera.org/algo-005/lecture/68)

[PPT for Universal Hashing: Definition and Example [Advanced - Optional] (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal-2.pptx" \o "PPT" \t "_new)

[PDf for Universal Hashing: Definition and Example [Advanced - Optional] (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal-2.pdf" \o "PDf" \t "_new)

[TYPED for Universal Hashing: Definition and Example [Advanced - Optional] (26 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal-2_typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Universal Hashing: Definition and Example [Advanced - Optional] (26 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=68_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Universal Hashing: Definition and Example [Advanced - Optional] (26 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=68_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Universal Hashing: Definition and Example [Advanced - Optional] (26 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=68" \o "Video (MP4)" \t "_new)

* [Universal Hashing: Analysis of Chaining [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/69)

[PPT for Universal Hashing: Analysis of Chaining [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal3-annotated.pptx" \o "PPT" \t "_new)

[PDF for Universal Hashing: Analysis of Chaining [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal3-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Universal Hashing: Analysis of Chaining [Advanced - Optional] (19 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal3-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Universal Hashing: Analysis of Chaining [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=69_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Universal Hashing: Analysis of Chaining [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=69_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Universal Hashing: Analysis of Chaining [Advanced - Optional] (19 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=69" \o "Video (MP4)" \t "_new)

* Completed[Hash Table Performance with Open Addressing [Advanced - Optional] (16 min)](https://class.coursera.org/algo-005/lecture/70)

[PPT for Hash Table Performance with Open Addressing [Advanced - Optional] (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal4-annotated.pptx" \o "PPT" \t "_new)

[PDF for Hash Table Performance with Open Addressing [Advanced - Optional] (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal4-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Hash Table Performance with Open Addressing [Advanced - Optional] (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-hash-universal4-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Hash Table Performance with Open Addressing [Advanced - Optional] (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=70_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Hash Table Performance with Open Addressing [Advanced - Optional] (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=70_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Hash Table Performance with Open Addressing [Advanced - Optional] (16 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=70" \o "Video (MP4)" \t "_new)

**XV. BLOOM FILTERS (Week 6)**

(expanded, click to collapse)

* Completed[Bloom Filters: The Basics (16 min)](https://class.coursera.org/algo-005/lecture/71)

[PPT for Bloom Filters: The Basics (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-bloom-annotated.pptx" \o "PPT" \t "_new)

[PDF for Bloom Filters: The Basics (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-bloom-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Bloom Filters: The Basics (16 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-bloom-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Bloom Filters: The Basics (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=71_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Bloom Filters: The Basics (16 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=71_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Bloom Filters: The Basics (16 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=71" \o "Video (MP4)" \t "_new)

* Completed[Bloom Filters: Heuristic Analysis (13 min)](https://class.coursera.org/algo-005/lecture/72)

[PPT for Bloom Filters: Heuristic Analysis (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-bloom-annotated.pptx" \o "PPT" \t "_new)

[PDF for Bloom Filters: Heuristic Analysis (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-bloom-annotated.pdf" \o "PDF" \t "_new)

[TYPED for Bloom Filters: Heuristic Analysis (13 min)](https://d396qusza40orc.cloudfront.net/algo1/slides/algo-ds-bloom-typed.pdf" \o "TYPED" \t "_new)

[Subtitles (text) for Bloom Filters: Heuristic Analysis (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=72_en&format=txt" \o "Subtitles (text)" \t "_new)

[Subtitles (srt) for Bloom Filters: Heuristic Analysis (13 min)](https://class.coursera.org/algo-005/lecture/subtitles?q=72_en&format=srt" \o "Subtitles (srt)" \t "_new)

[Video (MP4) for Bloom Filters: Heuristic Analysis (13 min)](https://class.coursera.org/algo-005/lecture/download.mp4?lecture_id=72" \o "Video (MP4)" \t "_new)

**PREVIEW OF PART 2**

(collapsed, click to expand)