



Introduction to Computer Science and Programming Using Python

MITx - 6.00.1x

Started - Aug 28, 2019

Week	Topic	Reading	Lecture Sequence	Problem Set	Problem Set Due Date
1	1 Introduction to Python	Chapter 1 Chapter 2.1-2.2			
	2 Core Elements of Programs	Chapter 2.3.1, 2.4 Chapter 3.1-3.2			Problem Set 1 due: Sept 12 at 23:30 UTC
2	3 Simple Algorithms	Chapter 3.3-3.5			
	4 Functions	Chapter 4.1-4.3, 4.5-4.6			Problem Set 2 due: Sept 19 at 23:30 UTC
3	5 Tuples and Lists	Chapter 5.1 - 5.3.1			
	6 Dictionaries	Chapter 4.4 Chapter 5.6			Problem Set 3 due: Sept 26 at 23:30 UTC
Midterm	Covers Material from Lecture 1 - Lecture 6				**** Out **** Fri Sept 27 at 14:00 UTC **** Due **** Tue Oct 1 at 23:30 UTC
4	7 Testing and Debugging	Chapter 6			
	8 Assertions and Exceptions	Chapter 7			Problem Set 4 due: Oct 10 at 23:30 UTC
5	9 Classes and Inheritance	Chapter 8.1-8.2			
	10 An Extended Example	Chapter 8.4			Problem Set 5 due: Oct 17 at 23:30 UTC
6	11 Computational Complexity	Chapter 9			
	12 Searching and Sorting Algorithms	Chapter 10.1-10.2			Problem Set 6 due: Oct 24 at 23:30 UTC
7	13 Plotting	Chapter 11			
	15 Summary and Wrap-up				
Final	Covers Material from all weeks				**** Out **** Fri Oct 25 at 14:00 UTC **** Due **** Oct 29 at 23:30 UTC

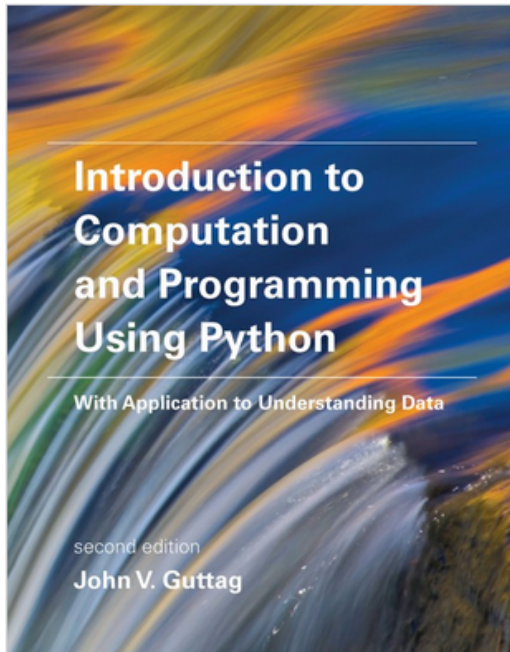


Introduction to Computational Thinking and Data Science

MITx - 6.00.2x

Started - Oct 16, 2019

Week	Topic	Reading	Lecture Sequence	Problem Set	Problem Set Due Date
1	1 Optimization and Knapsack Problem	Chapter 11, 12.1	Lecture 1	Problem Set 1	Thur, Nov 7, 23:30 UTC
	2 Decision Trees and Dynamic Programming	Chapter 13	Lecture 2		
	3 Graph Problems	Chapter 12.2	Lecture 3		
2	4 Plotting	Chapter 11	Lecture 4	Problem Set 2	Thur, Nov 21, 23:30 UTC
	5 Stochastic Thinking	Chapter 15.1, 15.2	Lecture 5		
	6 Random Walks	Chapter 14	Lecture 6		
Quiz	Covers Material from Lecture 1 - Lecture 6	All Readings from Lectures 1-6		Quiz	Out: Fri, Nov 22, 14:00 UTC Due: Tues, Nov 26, 23:30 UTC
3	7 Inferential Statistics	Chapter 15	Lecture 7	Problem Set 3	Thur, Dec 5, 23:30 UTC
	8 Monte Carlo Simulations	Chapter 16	Lecture 8		
	9 Sampling and Standard Error	Chapter 17	Lecture 9		
4	10 Experimental Data	Chapter 18	Lecture 10	Problem Set 4	Thur, Dec 12, 23:30 UTC
	11 Experimental Data	Chapter 19	Lecture 11		
5	12 Machine Learning	Chapter 22	Lecture 12		
	13 Statistical Fallacies	Chapter 21	Lecture 13		
Final Exam	Covers Material from all Lectures	All Readings from all lectures		Final Exam	Out: Fri, Dec 13, 14:00 UTC Due: Tues, Dec 17, 23:30 UTC



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