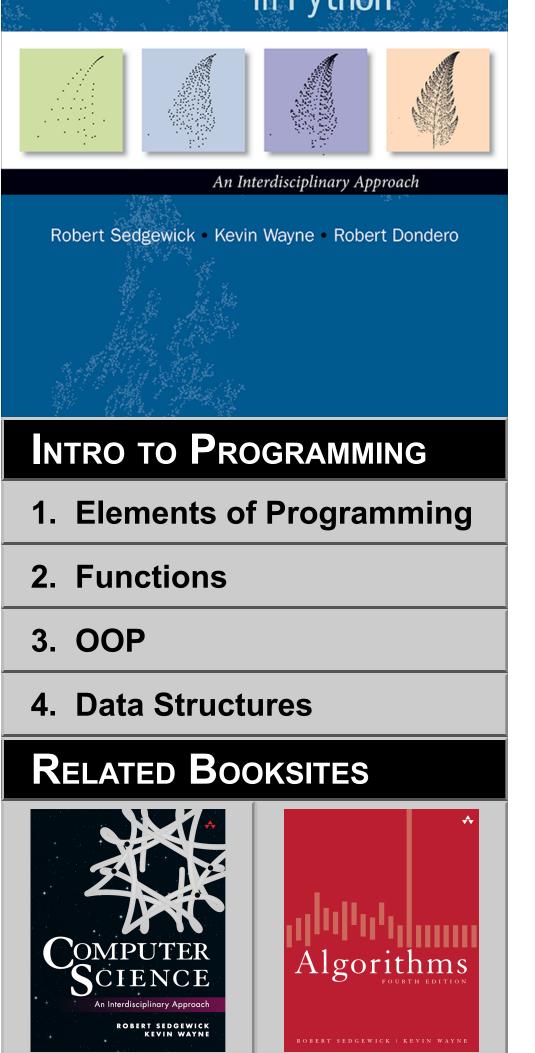
Programming in Python



Web Resources FAQ Code Errata

Appendices

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Booksite Modules

Below is a table of the booksite modules that we use throughout the textbook and booksite and beyond.

SECTION	MODULE	DESCRIPTION
1.5	stdio.py	functions to read/write numbers and text from/to stdin and stdout
1.5	stddraw.py	functions to draw geometric shapes
1.5	stdaudio.py	functions to create, play, and manipulate sound
2.2	stdrandom.py	functions related to random numbers
2.2	stdarray.py	functions to create, read, and write 1D and 2D arrays
2.2	stdstats.py	functions to compute and plot statistics
3.1	color.py	data type for colors
3.1	picture.py	data type to process digital images
3.1	instream.py	data type to read numbers and text from files and URLs
3.1	outstream.py	data type to write numbers and text to files

If you followed the instruction ou want to see the source code for the booksite modu

Programs and Data Sets

Below is a table of the Pytho access the data set; read the textbook for a full discussion

		wnload and unzip stdlib-python.zip 📮 .	are installed on your computer. If you
,	d data sets used in the textbook. C	lick on the program name to access the Python co	
1	ELEMEN	ITS OF PROGRAMMING	DATA
1.1.1	helloworld.py useargument.py	Hello, World using a command-line argument	——————————————————————————————————————
1.2.1	ruler.py intops.py	string concatenation example integer operators	——————————————————————————————————————
1.2.3	floatops.py quadratic.py	float operators quadratic formula	——————————————————————————————————————
1.2.5	leapyear.py flip.py	leap year flipping a fair coin	
1.3.2	tenhellos.py	your first loop	_
1.3.3	powersoftwo.py divisorpattern.py	computing powers of two your first nested loops	
1.3.5	harmonic.py sqrt.py	harmonic numbers Newton's method	——————————————————————————————————————
1.3.7	binary.py gambler.py	converting to binary gambler's ruin simulation	
1.3.9	factors.py sample.py	factoring integers sampling without replacement	
1.4.2	couponcollector.py	coupon collector simulation	
1.4.3	primesieve.py selfavoid.py	sieve of Eratosthenes self-avoiding random walks	——————————————————————————————————————
1.5.1	randomseq.py twentyquestions.py	generating a random sequence interactive user input	——————————————————————————————————————
1.5.3	average.py rangefilter.py	averaging a stream of numbers a simple filter	——————————————————————————————————————
1.5.5	plotfilter.py	standard input to draw filter	usa.txt
1.5.6	bouncingball.py	bouncing ball	elise.txt ascale.txt stairwaytoheaven.txt
1.5.7	playthattune.py	digital signal processing	entertainer.txt firstcut.txt freebird.txt looney.txt
1.6.1 1.6.2 1.6.3	transition.py randomsurfer.py markov.py	computing the transition matrix simulating a random surfer mixing a Markov chain	small.txt medium.txt -
2.1.1	harmonicf.py	FUNCTIONS harmonic numbers (revisited)	DATA
2.1.2	gauss.py coupon.py	Gaussian functions coupon collector (revisited)	——————————————————————————————————————
2.1.4	playthattunedeluxe.py	play that tune (revisited)	elise.txt ascale.txt stairwaytoheaven.txt entertainer.txt firstcut.txt
2.2.1	gaussian.py	Gaussian functions module	freebird.txt looney.txt
2.2.2	gaussiantable.py sierpinski.py	sample Gaussian client Sierpinski triangle	<u> </u>
2.2.4	ifs.py	iterated function systems	sierpinski.txt barnsley.txt coral.txt culcita.txt cyclosorus.txt dragon.txt fishbone.txt floor.txt koch.txt spiral.txt swirl.txt tree.txt zigzag.txt
2.2.5 2.3.1	bernoulli.py euclid.py	Bernoulli trials Euclid's algorithm	——————————————————————————————————————
2.3.2	towersofhanoi.py beckett.py	towers of Hanoi Gray code	
2.3.4	htree.py brownian.py	recursive graphics Brownian bridge	
2.4.1 2.4.2 2.4.3	percolationv.py percolationio.py visualizev.py	vertical percolation detection percolation support functions vertical percolation visualization client	test5.txt test8.txt -
2.4.4	estimatev.py percolation.py	vertical percolation probability estimate percolation detection	test5.txt test8.txt
2.4.6	visualize.py estimate.py	percolation visualization client percolation probability estimate	
3.1.1	potentialgene.py	PRIENTED PROGRAMMING potential gene identification	DATA
3.1.2	chargeclient.py alberssquares.py	charged particle client	_
		Albers squares	
3.1.4	luminance.py	luminance library	– mandrill.jpg mandrill.png
3.1.5	luminance.py grayscale.py	luminance library converting color to grayscale	darwin.jpg darwin.png mandrill.jpg mandrill.png
	luminance.py	luminance library	darwin.jpg darwin.png mandrill.jpg mandrill.png darwin.jpg darwin.png mandrill.jpg mandrill.png
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3.1.5 3.1.6	luminance.py grayscale.py scale.py fade.py	luminance library converting color to grayscale image scaling fade effect	darwin.jpg darwin.png mandrill.jpg mandrill.png darwin.jpg darwin.png mandrill.jpg mandrill.png darwin.jpg darwin.png
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pathfinder.py

smallworld.py

performer.py

4.5.4

4.5.5

4.5.6

shortest-paths client

small-world test

performer-performer graph

tinygraph.txt

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