

Codebook for Mastery Check 1

All material included in this document can be used for Mastery Check 1. If you use methods, functions, libraries, etc. outside of the ones below please ask an instructor or cite the resource used in your code. Failure to cite methods, functions, or libraries in your code that are not included in this document could result in losing points on your project.

Table of Contents

Codebook for Mastery Check 1.....	1
Data Types.....	3
Integers.....	3
Functions.....	3
Floats.....	3
Functions.....	3
Characters.....	3
Functions.....	3
Booleans.....	3
Functions.....	3
Concepts.....	4
Strings.....	4
Functions.....	4
Methods.....	4
Concepts.....	4
Tuple.....	5
Functions.....	5
Sets.....	5
Functions.....	5
Methods.....	5
Concepts.....	6
Lists.....	6
Functions.....	6
Methods.....	6
Concepts.....	6
Dictionaries.....	7
Methods.....	7
Concepts.....	7
General Python Concepts.....	7
Programing Concepts.....	7

Input/Output.....	7
Operators/Symbols.....	8
Compound Operators.....	9
If/Elif/Else.....	9
Math Module.....	9

Data Types

Integers

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
int()	Unit 1, Lesson 1, Slide 26	1.3 4.4

Floats

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
float()	Unit 1, Lesson 1, Slide 26	4.4

Characters

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
chr()		2.11

Booleans

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
bool()	-	-

Concepts

Method Name	Unit/Lesson #/Slide #	Zybooks Lesson
Empty Values are False	Unit 1, Lesson 06, Slide 7	

Strings

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
str()	Unit 1, Lesson 1, Slide 26	4.4
len()	Unit 1, Lesson 03, Slide 5	3.1

Methods

Method Name	Unit/Lesson #/Slide #	Zybooks Lesson
.format()	Unit 1, Lesson 2, Slide 9	-

Concepts

Concept Name	Unit/Lesson #/Slide #	Zybooks Lesson
Creating a new literal	Unit 1, Lesson 03, Slide 5	
Concatenation	Unit 1, Lesson 03, Slide 5	3.1
Indexing	Unit 1, Lesson 03, Slide 5	3.1
Formatted Placeholders {}	Unit 1, Lesson 04, Slide 6	4.4
Formatted name replacement	Unit 1, Lesson 04, Slide 6	
F strings	Unit 1, Lesson 04, Slide 6	4.4
Escaping characters	Unit 1, Lesson 05, Slide 5	

Tuple

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
tuple()		3.2

Sets

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
set()	Unit 1, Lesson 03, Slide 14	3.4
len()		3.4

Methods

Method Name	Unit/Lesson #/Slide #	Zybooks Lesson
.intersection()	Unit 1, Lesson 03, Slide 14	3.4
.difference()	Unit 1, Lesson 03, Slide 14	3.4
.symmetric_difference()	Unit 1, Lesson 03, Slide 14	3.4
.union()	Unit 1, Lesson 03, Slide 14	3.4
.add()		3.4
.remove()		3.4
.pop()		3.4
.update()		3.4
.clear()		3.4

Concepts

Method Name	Unit/Lesson #/Slide #	Zybooks Lesson
Make a set from a list	Unit 1, Lesson 03, Slide 14	
Set equivalence (==)	Unit 1, Lesson 03, Slide 14	
Subset check (<, >)	Unit 1, Lesson 03, Slide 14	
Set union ()	Unit 1, Lesson 03, Slide 14	

Lists

Functions

Function Name	Unit/Lesson #/Slide #	Zybooks Lesson
len()	Unit 1, Lesson 03, Slide 7	3.2
min()	Unit 1, Lesson 03, Slide 10	3.2
max()	Unit 1, Lesson 03, Slide 10	3.2
sum()	Unit 1, Lesson 03, Slide 10	3.2

Methods

Method Name	Unit/Lesson #/Slide #	Zybooks Lesson
.append()	Unit 1, Lesson 03, Slide 8	3.2
.count()	Unit 1, Lesson 03, Slide 12	3.2
.index()	Unit 1, Lesson 03, Slide 12	3.2
.pop()	Unit 1, Lesson 03, Slide 8	3.2
.remove()	Unit 1, Lesson 03, Slide 8	3.2

Concepts

Concept Name	Unit/Lesson #/Slide #	Zybooks Lesson
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Creating a new list	Unit 1, Lesson 03, Slide 7	3.2
Concatenation	Unit 1, Lesson 03, Slide 7	
indexing	Unit 1, Lesson 03, Slide 7	3.2

Dictionaries

Methods

Method Name	Unit/Lesson #/Slide #	Zybooks Lesson
.pop()	-	-

Concepts

Method Name	Unit/Lesson #/Slide #	Zybooks Lesson
Create a new dictionary	Unit 1, Lesson 04, Slide 3	4.1
Indexing	Unit 1, Lesson 04, Slide 3	4.1
Add, Update, Delete element	Unit 1, Lesson 04, Slide 4	4.1

General Python Concepts

Programing Concepts

Function	Unit/Lesson #	Slide #/Zybooks Lesson
Attention to Runtime Errors	Unit 1, Lesson 3, slide 2	
Commenting code	Unit 1, Lesson 3, slide 2	
Debugging print()	Unit 1, Lesson 3, slide 2	

Input/Output

Function	Unit/Lesson #	Slide #/Zybooks Lesson
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print()	Unit 1, Lesson 1, Slide 21	1.3
input()	Unit 1, Lesson 1, Slide 21	1.3
.format()	Unit 1, Lesson 2, Slide 9	

Operators/Symbols

Symbol	Unit/Lesson #/Slide #	Zybooks Lesson
Assignment (=)	Unit 1, Lesson 2, Slide 3	
Equality (==)	Unit 1, Lesson 2, Slide 3	
Concatenation (+)	Unit 1, Lesson 2, Slide 4-5	
Addition (+)	Unit 1, Lesson 2, Slide 4	
Subtraction (-)		2.5
Multiplication (*)		2.5
Division (/)		2.5
Exponential (**)		2.5
!=	Unit 1, Lesson 06, Slide 2	13.3
<	Unit 1, Lesson 06, Slide 2	
<=	Unit 1, Lesson 06, Slide 2	
>	Unit 1, Lesson 06, Slide 2	
>=	Unit 1, Lesson 06, Slide 2	
and	Unit 1, Lesson 06, Slide 3	5.5
not	Unit 1, Lesson 06, Slide 3	5.5
or	Unit 1, Lesson 06, Slide 4	5.5
in	Unit 1, Lesson 06, Slide 11	6.1

Compound Operators

Symbol	Unit/Lesson #/Slide #	Zybooks Lesson
Addition (+=)		2.6
Subtraction (-=)		2.6
Multiplication (*=)		2.6
Division (/=)		2.6
Modulo (%=)		2.6

If/Elif/Else

Loop Name	Unit/Lesson #/Slide #	Zybooks Lesson
If statement	Unit 1, Lesson 05, Slide 2	5.1
If/else statement	Unit 1, Lesson 05, Slide 2	5.1
If/elif/else statement	Unit 1, Lesson 05, Slide 2	5.2
Independent conditionals	Unit 1, Lesson 06, Slide 9	5.7

Math Module

Method/Function	Unit/Lesson #/Slide #	Zybooks Lesson
Factorial: factorial()		2.9
Exponential: exp()		2.9
Power: pow()		2.9
Trigonometric functions		2.9