DMDU references

July 17, 2022

Table 1: References by topic

Section	Topic	Reference
Variables and data types	Variables and data types	Ceder (2018)
Variables and data types	What Python doesn't do as well	Ceder (2018)
Variables and data types	Numbers	Ceder (2018)
Variables and data types	Variables and assignments	Ceder (2018)
Variables and data types	Expressions	Ceder (2018)
Variables and data types	Strings	Ceder (2018)
Variables and data types	Casting variables	Ceder (2018)
Variables and data types	Getting input from user	Ceder (2018)
Variables and data types	Basic python style	Ceder (2018)
Collections	Data Structures	Gorelick and Ozsvald (2020)
Collections	Lists and tuples	Gorelick and Ozsvald (2020)
Collections	Lists	Ceder (2018)
Collections	List indices	Ceder (2018)
Collections	List slicing	Ceder (2018)
Collections	Modifying lists	Ceder (2018)
Collections	Sorting lists	Ceder (2018)
Collections	Other common list operations	Ceder (2018)
Collections	List concatenation with the + operator	Ceder (2018)
Collections	List initialization with the * operator	Ceder (2018)
Collections	List minimum of maximum with min and max	Ceder (2018)
Collections	List matches with count	Ceder (2018)
Collections	Summary of list operations	Ceder (2018)
Collections	Tuples	Ceder (2018)
Collections	Packing and unpacking tuples	Ceder (2018)
Collections	Converting between lists and tuples	Ceder (2018)
Collections	Sets	Ceder (2018)
Collections	Set operations	Ceder (2018)
Collections	Dictionaries	Ceder (2018)
Collections	What is a dictionary?	Ceder (2018)
Collections	Other dictionary operations	Ceder (2018)

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Collections	Word counting	Ceder (2018)
Collections	What can be used as key?	Ceder (2018)
Collections	Sparse matrices	Ceder (2018)
Control flow	The while loop	Ceder (2018)
Control flow	The if-elif-else	Ceder (2018)
Control flow	Where's the case statement in Python?	Ceder (2018)
Control flow	The for loop	Ceder (2018)
Control flow	The range function	Ceder (2018)
Control flow	Controlling range with starting and stepping values	Ceder (2018)
Control flow	The for loop and tuple unpacking	Ceder (2018)
Control flow	The enumerate function	Ceder (2018)
Control flow	The zip function	Ceder (2018)
Functions	Basic function definitions	Ceder (2018)
Functions	Positional parameters	Ceder (2018)
Functions	Default values	Ceder (2018)
Functions	Passing arguments by parameter name	Ceder (2018)
Functions	Variable number of arguments	Ceder (2018)
Functions	Dealing with an indefinite number of positional arguments	Ceder (2018)
Functions	Dealing with an indefinite number of arguments passed by keyword	Ceder (2018)
Functions	Mutable objects as arguments	Ceder (2018)
Functions	Local and global variables	Ceder (2018)
Functions	lambda expressions	Ceder (2018)
Functions	Generator functions	Ceder (2018)
Functions	More generator functions	Danjou (2018)
Functions	Type Hints	Sweigart (2020)
List-dict-comp	List and dictionary comprehensions	Ceder (2018)
List-dict-comp	Multiple for statement	Danjou (2018)
List-dict-comp	Generator expressions	Ceder (2018)
List-dict-comp	Functional Programming	Sweigart (2020)
List-dict-comp	Side effect	Sweigart (2020)
List-dict-comp	Higher-Order Functions	Sweigart (2020)
List-dict-comp	Applying functions to items with map()	Danjou (2018)
List-dict-comp	Filtering List with filter()	Danjou (2018)
List-dict-comp	Finding items that satisfy conditions with any() and all()	Danjou (2018)
List-dict-comp	Python Tricks	Mayer (2020)
List-dict-comp	Using list comprehension to find top earners	Mayer (2020)
List-dict-comp	Using Generator expressions to find companies that pay below minimum wage	Mayer (2020)
Numpy	Numpy	Mayer (2020)
Numpy	Main memory and caches	Herlihy et al. (2021)
Numpy	Processors	Herlihy et al. (2021)
Numpy	L1, L2 and L3 caches	Robey and Zamora (2021)
Numpy	Granularity	Herlihy et al. (2021)
Numpy	Vectorized operations	Robey and Zamora (2021)

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Numpy	let's get to hands on	Mayer (2020)
Numpy	Problem 1	Mayer (2020)
Numpy	Working with numpy arrays	Mayer (2020)
Numpy	Broadcasting	Mayer (2020)
Numpy	Problem 2	Mayer (2020)
Numpy	Array types	Mayer (2020)
Numpy	Conditional array search	Mayer (2020)
Numpy	Reshaping and Resizing	Johansson (2019)
Numpy	Matrix and Vector Operations	Johansson (2019)
Pandas	Pandas	Paskhaver (2021)
Pandas	Importing a data set	Paskhaver (2021)
Pandas	Manipulating a DataFrame	Paskhaver (2021)
Pandas	Counting values in a Series	Paskhaver (2021)
Pandas	Filtering a column by one or more criteria	Paskhaver (2021)
Pandas	Grouping data	Paskhaver (2021)

References

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Danjou, J. (2018). *Serious Python. Black-Belt Advice on Deployment, Scalability, Testing, and More*. No Starch Press.

Gorelick, M. and Ozsvald, I. (2020). *High Performance Python: Practical Performant Programming for Humans*. O'Reilly Media.

Herlihy, M., Shavit, N., Luchangco, V., and Spear, M. (2021). *The Art of Multiprocessor Programming (Second Edition)*. Morgan Kaufmann, Boston, second edition edition.

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Sweigart, A. (2020). *Beyond the Basic Stuff with Python: Best Practices for Writing Clean Code*. No Starch Press.