

# 8 Best Python Cheat Sheets for Beginners and Intermediate Learners

Python Cheat Sheet can be really helpful when you're working on a project or trying a set of exercises related to a specific topic.

If you are just getting started with Data Science. I've got a few practical reads for you. One about [The Best Python for Data Science Courses](#) from World-Class Educators and One about Learning how to [learn Data Science](#) (with Python, Maths and Statistics).

And now rather than explaining to you the importance of cheat sheets, why not just begin with the most useful Python resources available on the internet (for free) in the form of cheat sheet.

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## 7+ Best Python Cheat Sheets ...

Here's a curated a list of Python Cheat Sheets and most commonly used Python Libraries. You'll be able to download them with ease and grasp the fundamentals for long-term benefits

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### 1. Python for Data Science Cheat Sheet



This Python Cheat Sheet presents the Python basics that you need to do data science and will guide you through variables and data types, Strings, Lists, to eventually land at the fundamental package for scientific computing with Python, Numpy.

Also, This cheat sheet is free additional material that complements DataCamp's [Intro to Python for Data Science](#) course, where you learn by doing.

### Python For Data Science Cheat Sheet

#### Python Basics

Learn More Python for Data Science Interactively at [www.datacamp.com](http://www.datacamp.com)

##### Variables and Data Types

###### Variable Assignment

```
>>> x=5
>>> x
5
```

###### Calculations With Variables

>>> x+2 7	Sum of two variables
>>> x-2 3	Subtraction of two variables
>>> x*2 10	Multiplication of two variables
>>> x**2 25	Exponentiation of a variable
>>> x%2 1	Remainder of a variable
>>> x/float(2) 2.5	Division of a variable

###### Types and Type Conversion

str()	'5', '3.45', 'True'	Variables to strings
int()	5, 3, 1	Variables to integers
float()	5.0, 1.0	Variables to floats
bool()	True, True, True	Variables to booleans

###### Asking For Help

```
>>> help(str)
```

##### Strings

```
>>> my_string = 'thisStringIsAwesome'
>>> my_string
'thisStringIsAwesome'
```

###### String Operations

```
>>> my_string * 2
'thisStringIsAwesomethisStringIsAwesome'
>>> my_string + 'Innit'
'thisStringIsAwesomeInnit'
>>> 'm' in my_string
True
```

##### Lists

Also see NumPy Arrays

```
>>> a = 'is'
>>> b = 'nice'
>>> my_list = ['my', 'list', a, b]
>>> my_list2 = [[4,5,6,7], [3,4,5,6]]
```

###### Selecting List Elements

Index starts at 0

Subset	
>>> my_list[1]	Select item at index 1
>>> my_list[-3]	Select 3rd last item
Slice	
>>> my_list[1:3]	Select items at index 1 and 2
>>> my_list[1:]	Select items after index 0
>>> my_list[:3]	Select items before index 3
>>> my_list[:]	Copy my_list
Subset Lists of Lists	
>>> my_list2[1][0]	my_list[list][itemOfList]
>>> my_list2[1][:2]	

###### List Operations

```
>>> my_list + my_list
['my', 'list', 'is', 'nice', 'my', 'list', 'is', 'nice']
>>> my_list * 2
['my', 'list', 'is', 'nice', 'my', 'list', 'is', 'nice']
>>> my_list2 > 4
True
```

###### List Methods

>>> my_list.index(a)	Get the index of an item
>>> my_list.count(a)	Count an item
>>> my_list.append('!')	Append an item at a time
>>> my_list.remove('!')	Remove an item
>>> del(my_list[0:1])	Remove an item
>>> my_list.reverse()	Reverse the list
>>> my_list.extend('!')	Append an item
>>> my_list.pop(-1)	Remove an item
>>> my_list.insert(0, '!')	Insert an item
>>> my_list.sort()	Sort the list

##### Libraries

Import libraries

```
>>> import numpy
>>> import numpy as np
Selective import
>>> from math import pi
```

pandas Data analysis  
NumPy Scientific computing  
matplotlib 2D plotting  
Machine learning

##### Install Python

ANACONDA Leading open data science platform powered by Python  
spyder Free IDE that is included with Anaconda  
jupyter Create and share documents with live code, visualizations, text, ...

##### NumPy Arrays

Also see Lists

```
>>> my_list = [1, 2, 3, 4]
>>> my_array = np.array(my_list)
>>> my_2darray = np.array([[1,2,3],[4,5,6]])
```

###### Selecting NumPy Array Elements

Index starts at 0

Subset	
>>> my_array[1]	Select item at index 1
Slice	
>>> my_array[0:2]	Select items at index 0 and 1
array([1, 2])	
Subset 2D NumPy arrays	
>>> my_2darray[:,0]	my_2darray[rows, columns]
array([1, 4])	

###### NumPy Array Operations

```
>>> my_array > 3
array([False, False, False,  True], dtype=bool)
>>> my_array * 2
array([2, 4, 6, 8])
>>> my_array + np.array([5, 6, 7, 8])
array([6, 8, 10, 12])
```

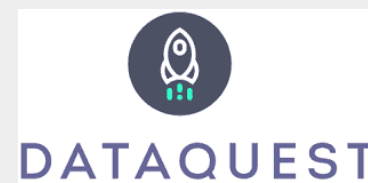
###### NumPy Array Functions

>>> my_array.shape	Get the dimensions of the array
>>> np.append(other_array)	Append items to an array
>>> np.insert(my_array, 1, 5)	Insert items in an array
>>> np.delete(my_array, [1])	Delete items in an array
>>> np.mean(my_array)	Mean of the array
>>> np.median(my_array)	Median of the array
>>> my_array.corrcoef()	Correlation coefficient
>>> np.std(my_array)	Standard deviation

DataCamp  
Learn Python for Data Science Interactively

You can [Download Pdf here](#)

## 2. Python Cheat Sheet for Data Science: Basics



This cheat sheet is the companion to free [Python Programming Beginner Course](#) course offered by Dataquest which can start you on your data science journey.

You'll be able to practice reading files, Strings, Numeric Types, and Mathematical Operations,

Lists and Dictionaries, Modules and Functions, Boolean Comparisons, Statements, and Loops.



You can [Download here](#)

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Jump start your career as a data scientist with [Datacamp's Data Scientist with Python career track](#). [Get started](#) for free!

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### 3. Python Crash Course



This Python Cheat is from the Book [Python Crash Course](#) which aims to remind you of syntax rules and grasp all the important concepts in Python programming as a beginner.

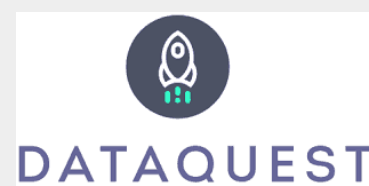
You will also create a game with Pygame, Create Data Visualization with PyGal and build Web Apps with Django.



You can [Download Pdf here](#)

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### 4. Python Cheat Sheet for Data Science: Intermediate



This cheat sheet assumes you are familiar with the content of the Python Basic Cheat Sheet

from Dataquest.

This Python cheat sheet provides in-depth focus on Lists, Strings, Range, Dictionaries, Sets, Regular Expressions, List Comprehension, Functions for Looping, DateTime, Random, Counter and Try Except.



You can [Download here](#)

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## 5. Importing Data in Python Cheat Sheet



This Python Cheat Sheet from Datacamp provides everything that you need to kickstart your data science learning with Python. Moreover, you'll have a handy reference guide to importing your data, from flat files to files native to other software, and relational databases.

You'll also learn how you can get data from files native to other software such as Excel spreadsheets, Stata, SAS and MATLAB files and relational databases.



You can [Download Pdf here](#)

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Join over 300,000 others in the [Python Specialization](#) offered by the University of Michigan through [Coursera](#).

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## 6. Python NumPy Cheat Sheet



This cheat sheet assumes you are familiar with NumPy. If you're interested in learning NumPy, you can start learning about NumPy in Python Data Science Course from Dataquest.

This Python Numpy Cheat Sheet will make you familiar with NumPy Array and how you can Import and Export Data for analysis. You'll also index data and retrieve results, using NumPy with Scalar Math, Vector Math, and Statistics will hold no secrets for you any longer.



You can [Download here](#)

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## 7. Python Data Visualization: Bokeh Cheat Sheet



This Python Cheat Sheet will guide you to interactive plotting and statistical charts with Bokeh. Python Bokeh Cheat Sheet is a free additional material for Interactive Data Visualization with Bokeh Course and is a handy one-page reference for those who need an extra push to get started with Bokeh.

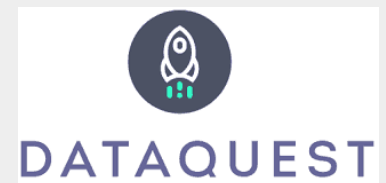
This cheat sheet will walk you through making beautiful plots and also introduce you to the basics of statistical charts.



You can [Download Pdf here](#)

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## 8. Python for Data Science: Pandas Cheat Sheet



Pandas is a data-centric Python package. It's common when first learning pandas to have trouble remembering all the functions and methods that you need, and it's nice to have a handy reference.

We hope this cheat sheet will help you out! If you are interested in learning, you can sign up for free and start learning Pandas for [Data Science Course](#) offered by Dataquest.



You can [Download here](#)

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Thanks for making it to the end ☐

☒ Share & Learn! Do add your favourite Python Cheat Sheet in the comments below.

You may also be interested in checking the list of [Machine Learning Cheat Sheets](#) in Python and Maths or listening to a [Python Podcast](#) to bootstrap your knowledge in Python.

If you liked this article, i've got few practical reads for you.

- Statistics for Data Science
- Best and Affordable [Data Science Courses](#)

- Skills in Python for Every Data Scientist

I've also got this Data Science Newsletter that you might be into. I send a tiny email once or twice every quarter with some useful resource I've found.

*Don't worry, I hate spam as much as you. Feel free to subscribe. 📧*

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