

Python



$S = \{ 10 , 5 , 88 , 2 \}$



Unordered

Mutable

Unique

Set



```
S = { 'a' : 10 , 'b' : 5 , 'c ' : 88 , 'd' : 2 }
```

Ordered

Mutable

Unique

Dictionary



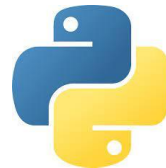
List Vs Set Vs Dictionary Vs Tuple

Lists	Sets	Dictionaries	Tuples
List = [10, 12, 15]	Set = {1, 23, 34} Print(set) -> {1, 23, 24} Set = {1, 1} print(set) -> {1}	Dict = {"Ram": 26, "mary": 24}	Words = ("spam", "eggs") Or Words = "spam", "eggs"
Access: print(list[0])	Print(set). Set elements can't be indexed.	print(dict["ram"])	Print(words[0])
Can contains duplicate elements	Can't contain duplicate elements. Faster compared to Lists	Can't contain duplicate keys, but can contain duplicate values	Can contains duplicate elements. Faster compared to Lists
List[0] = 100	set.add(7)	Dict["Ram"] = 27	Words[0] = "care" -> TypeError
Mutable	Mutable	Mutable	Immutable - Values can't be changed once assigned
List = []	Set = set()	Dict = {}	Words = ()
Slicing can be done print(list[1:2]) -> [12]	Slicing: Not done.	Slicing: Not done	Slicing can also be done on tuples
<u>Usage:</u> Use lists if you have a collection of data that doesn't need random access. Use lists when you need a simple, iterable collection that is modified frequently.	<u>Usage:</u> - Membership testing and the elimination of duplicate entries. - when you need uniqueness for the elements.	<u>Usage:</u> - When you need a logical association b/w key:value pair. - when you need fast lookup for your data, based on a custom key. - when your data is being constantly modified.	<u>Usage:</u> Use tuples when your data cannot change. A tuple is used in combination with a dictionary, for example, a tuple might represent a key, because its immutable.

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Rajkumar Rampelli, Python

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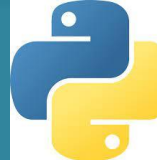
Modules and Packages

- Matplotlib
- Pandas
- Numpy
- Seaborn

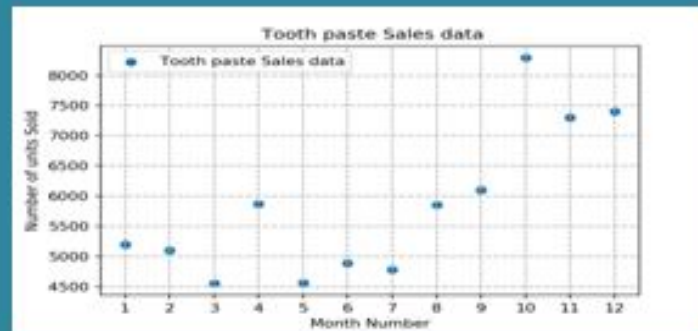
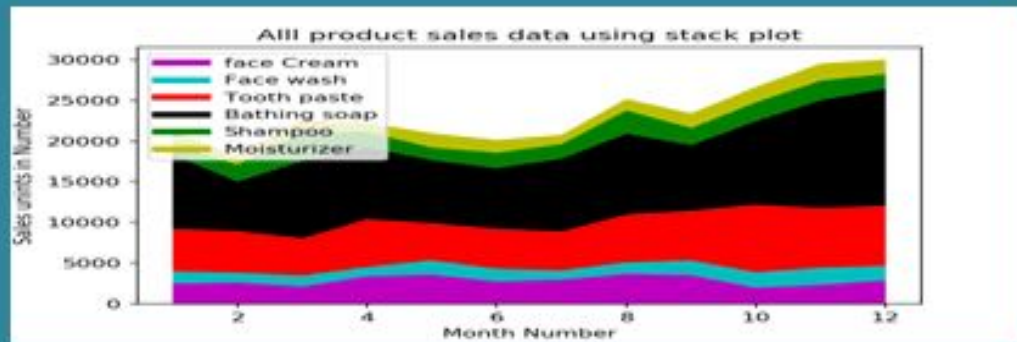
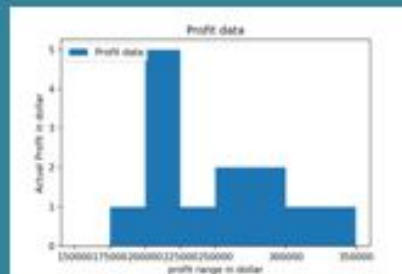




Python Matplotlib



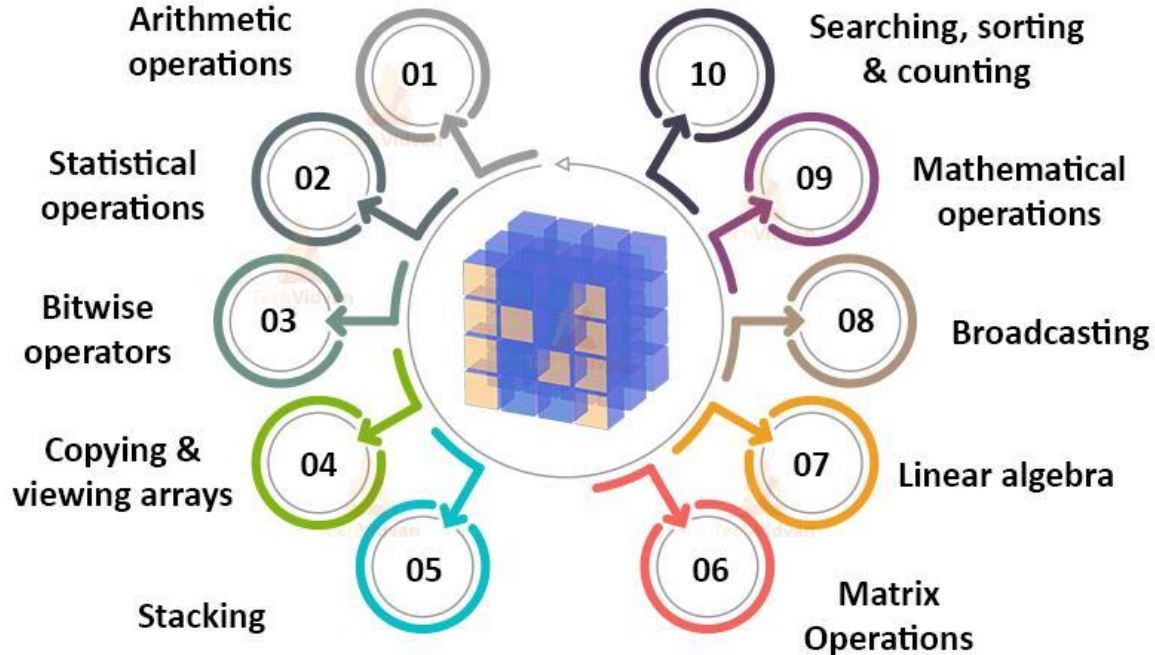
Practice Data Visualization In, Practice Questions Online, Solution Provided for Each Question



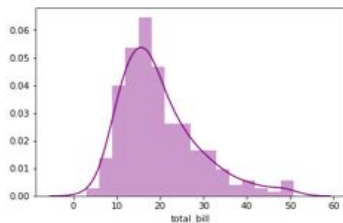
Python Pandas Tutorial Guide



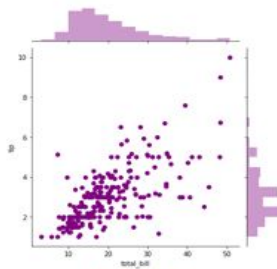
Uses of NumPy



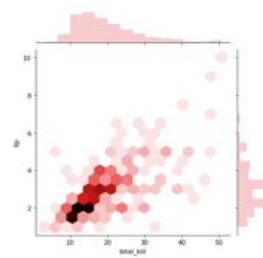
Seaborn Plots



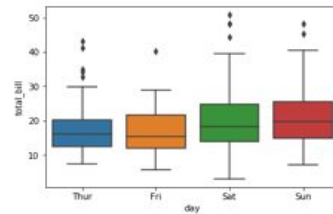
distplot



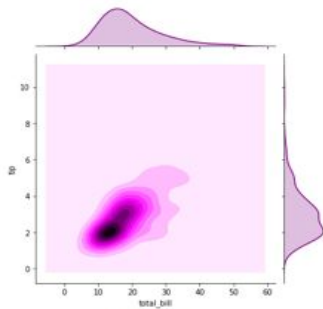
Jointplot



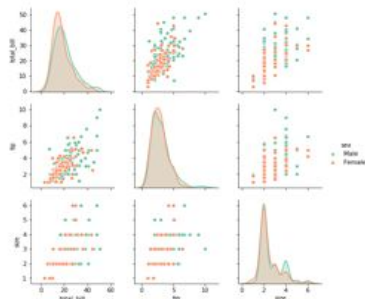
Hexplots



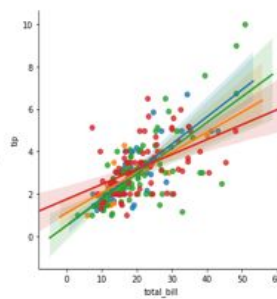
Boxplots



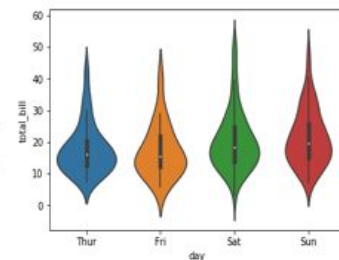
KDE Plot



Pair Plots



LM Plots



Violin Plots

