

## TOOL

# Libraries and Functions M1

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In Module 1, you used the Standard Python Library, as well as **re**, the regex library. This tool lists the methods and objects you encountered and practiced in Module 1 of this course.

## Declaring String Variables

```
s = 'string'
s = "string"
s = str(x)
```

where **s** is a string, and **x** is a Python object

## Slicing

```
s[n]
s[-n]
s[n:]
s[:n]
s[n1:n2]
```

where **n** is an integer index

## Determining String States

```
s.startswith(ss)
s.endswith(ss)
s.find(ss)
```

```
s.isalpha()
s.isdecimal()
s.isalnum()
s.islower()
s.isupper()
```

wheres **ss** is a substring



## Counting Strings

```
len(s)
```

```
s.count(ss)
```

```
from collections import Counter
Counter(s)
Counter(s).most_common(n)
[c for c, f in Counter(s).most_common(n)]
list(zip(*Counter(s).most_common(n)))
```

where **c** is the *n*th most common word in string **s**, and **f** is the corresponding word frequency

## Manipulating Strings Using Built-In String Methods

```
s1+s+s2
s.join([s1,s2])
```

```
s.lower()
s.upper()
s.capitalize()
s.title()
s.strip()
s.strip([ss1])
s.replace(ss1,ss2)
```

## Manipulating Strings Using Regex

```
import re
re.split(p1,s)
re.sub(p1,ss2,s)
```

where **p1** is a regex pattern

## Finding Regex Patterns

```
import re
re.search(p1,s)
re.search(p1,s)[0]
re.search(p1,s).group(0)
re.findall(p1,s)
```

