



Lecture # 2.4

String Data Type

**DATA
SCIENCE**



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Today's Agenda

- Recap
 - Numeric Data Types
 - Operators
- String Data Type
 - Defining Strings
 - Accessing String elements
 - Strings are immutable
 - Slicing Strings
 - String Concatenation
 - Creating Large Strings
 - Find and Replace
 - Split and Join
 - Misc String Functions

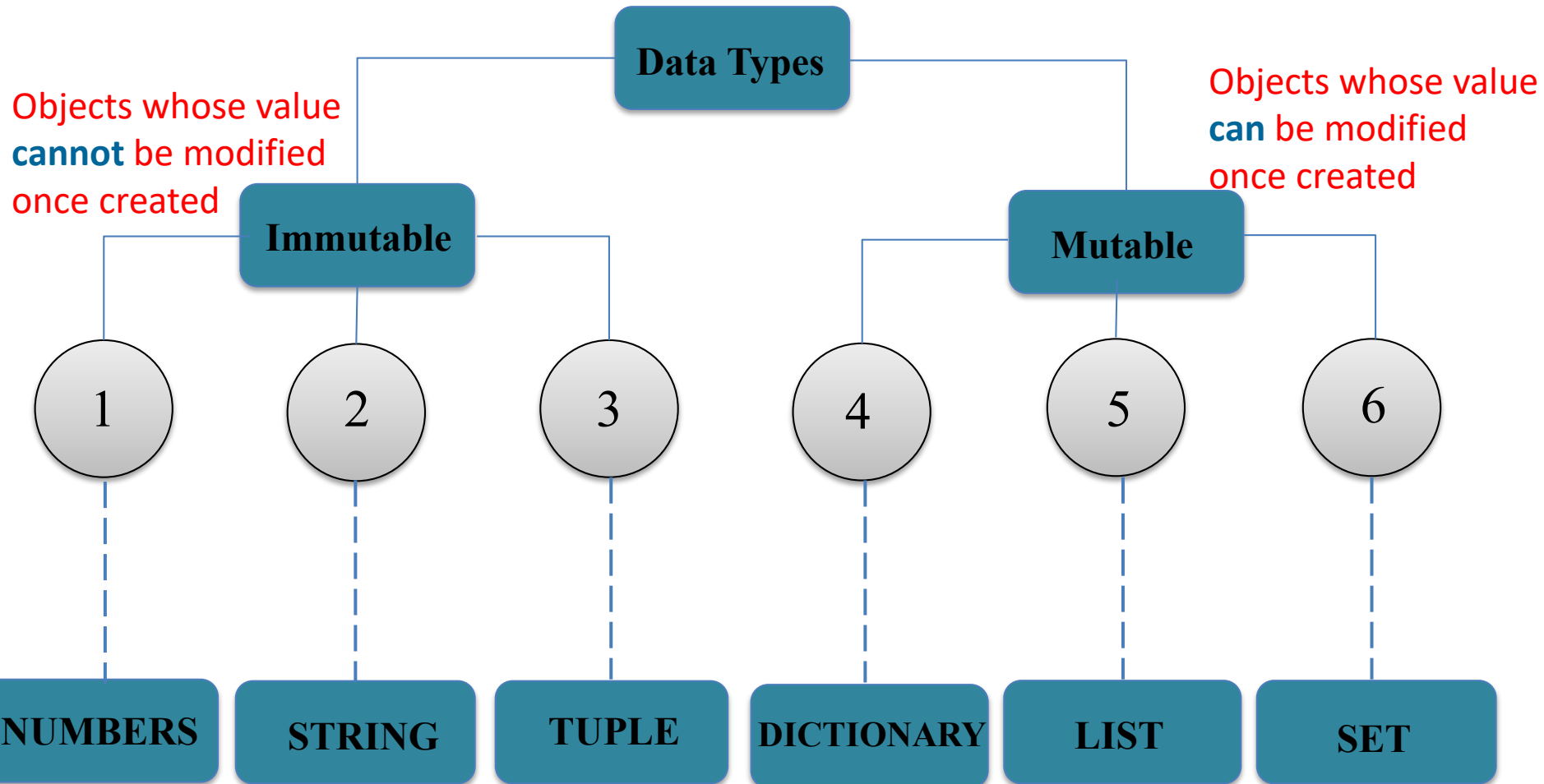




Recap



Overview of Data Types





Operators





String Data Type



String Data Type

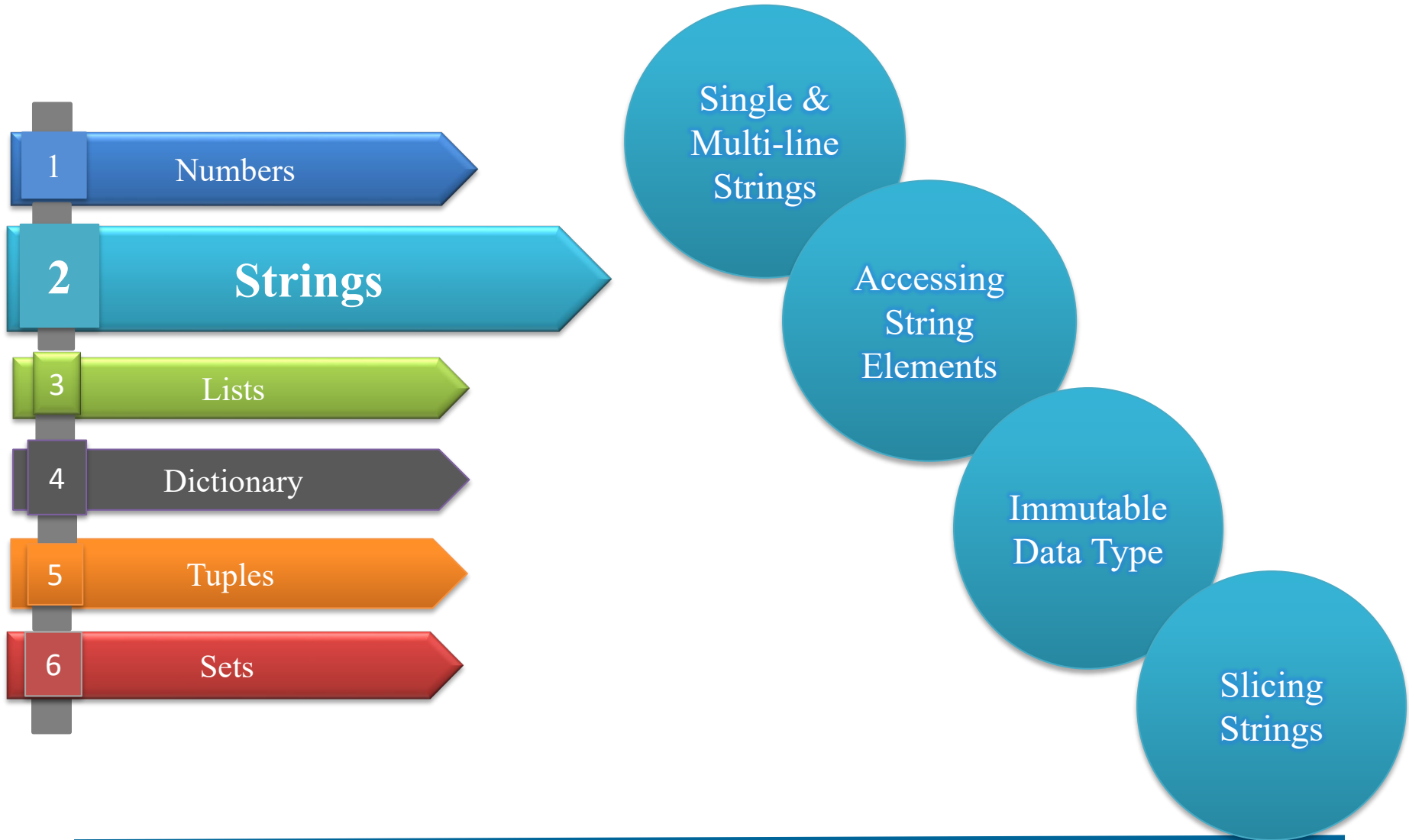
- A String is an object type in Python, that is actually a sub-type of a broader classification of object type called **sequence**.
- A sequence is an object that contains components placed one after the other, where each object is given a numeric index, which identifies that component and its position within the whole sequence.
- As Python is a zero indexed based language, the first object of any sequence is always indexed zero.
- A string is defined using opening and closing delimiters. These delimiters are single or double quotes

```
str1 = "Hello World"  
str2 = 'Python is fun'
```



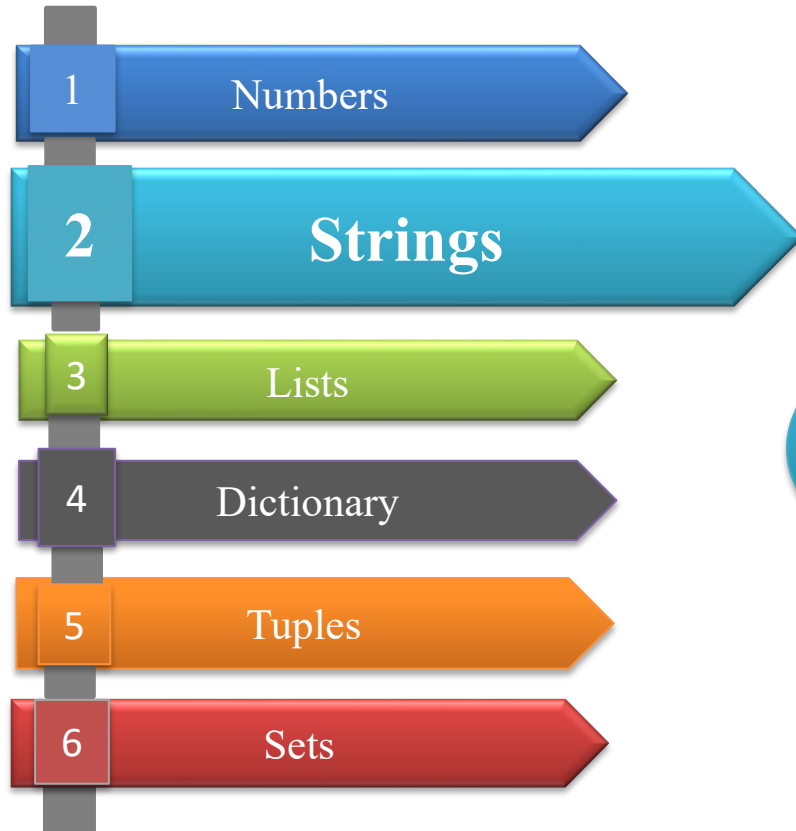
Defining and Accessing Characters in a String

- String data type is used to store text (a set of characters)





String: Operations





String: Operations

➤ Concatenation

```
str='python'  
str2='Program'
```



```
str + str2
```



```
pythonProgram
```

➤ Repetition

```
str='AB'
```



```
str*2
```



```
ABAB
```

➤ Slicing

```
str='data'
```



```
str[1:3]
```



```
at
```

➤ Indexing

```
str='python'
```



```
str[0]
```



```
p
```



Strings in Python

<https://github.com/arifpucit/data-science.git>

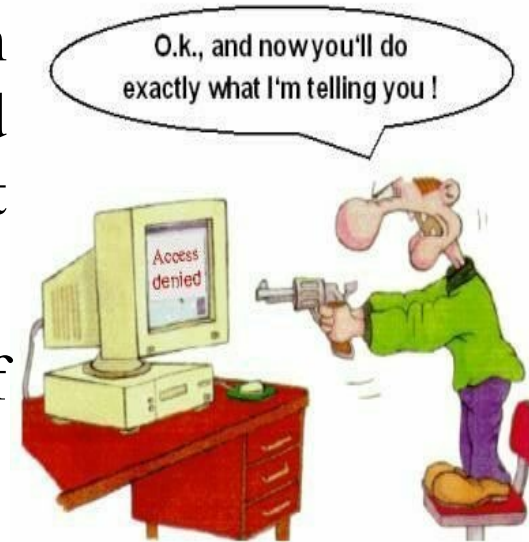


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Things To Do

- Play around with the basic data types of Python discussed in class. Do check out the mentioned links in the practice notebooks files to learn at your own pace.
- Practice code to have a clear understanding of different operators discussed in class
- This practice will of course help you in later part of the course



Coming to office hours does NOT mean you are academically weak!