

## Python Tutorial for Beginners 2: Strings - Working with Textual Data

- If the message you want to print has apostrophe, use double quotations to bracket the message so that the ' does not end the string:  
`message = "Bobby's World"`
- To make a multi-line string, use 3 quotation marks at the beginning and end of the string:  
`message = """Bobby's World was a good cartoon in the 1990s."""`
- **`print(len(message))` len=prints out the number of characters (including spaces) in the "message"**
- **`print(message[0])`=prints out the characters selected in the message (0 is the first and so on, so the 8th letter is the index of 7)**
- **`print(message[0:5])`=prints out the characters index of 0-5 (characters 1-6) if we don't put anything at the beginning of the colon (:5), then it will assume it starts at the beginning of the line and end at the index of 5, if we don't put anything after the colon (5:), then it will assume that it prints out the message starting at the index of 5 and ends at the end of the message. **This whole process is called slicing.****
- Methods are basically the same thing as a function. A method is just a function that belongs to an object.
- **`print(message.lower())`=print the message in all lowercase form.**
- **`print(message.upper())`=print the message in all uppercase form.**
- **`print(message.count('Hello'))`=counts the number of "Hello" in the message.**
- **`print(message.find('World'))`= prints the location of where World starts (index of where it starts). If it returns a "-1", that means that it can't find the given characters in the message variable.**
- **`message = message.replace('World', 'Universe')`=reassigns the variable "message" to message with Universe in the place of World.**
- **`message = greeting + ' ' + name`=the ' ' adds the space in between the greeting and name variable.**
- **`message = '{}, {}. Welcome!'.format(greeting, name)`=uses the placeholder to make the string more simple to read.**
- The idea behind f-strings (only available in Python 3.6 or above) is to make string formatting as simple as possible (e.g. `message = f'{greeting}, {name}. Welcome!'`)
- **`print(dir(name))`=prints out all methods and attributes of "name".**
- **`print(help(str))`=prints out all the methods available to us and tells us what each method does.**
- **`print(help(str.lower))`=prints out what the .lower function does.**