

# Python Strings Assignment

## Part 1: Understanding String Literals

1. Create three different strings using each type of quotation:
  - o Single quotes ('example')
  - o Double quotes ("example")
  - o Triple quotes (""""example""")
2. Explain in your own words: What is the advantage of each type of quotation?
3. Write a string that contains both single and double quotes inside it. Example: She said, "I'm going to the store."
4. Create a multi-line string using triple quotes that describes your favorite hobby.

## Part 2: String Methods Practice

1. Create a variable `full_name` with your full name (first and last name). Then write code to:
  - o Print your name in all uppercase letters
  - o Print your name in all lowercase letters
  - o Print your name with the first letter of each name capitalized
2. Create a variable `messy_text = " Python programming is fun! "` Then write code to:
  - o Remove all the extra spaces at the beginning and end
  - o Replace "fun" with "amazing"
  - o Count how many times the letter 'i' appears
3. Create a variable `sentence = "The quick brown fox jumps over the lazy dog"` Then write code to:
  - o Split this sentence into a list of words
  - o Join the words back together with dashes between them
  - o Check if the sentence starts with "The"
  - o Find the position of the word "fox"

## Part 3: F-Strings

1. Create variables for:
  - o Your name
  - o Your age
  - o Your favorite programming language

Then use f-strings to create these sentences:

- o "My name is {your\_name} and I am {your\_age} years old."
- o "I enjoy programming in {language}, it's my favorite!"
- o Create a math expression inside an f-string: "In 5 years, I will be {age + 5} years old."

## Part 4: Combining String Methods with F-Strings

Create a program that:

1. Asks for user input about their first name, last name, and birth year
2. Uses string methods to properly capitalize their name
3. Uses f-strings to create a profile message: "Profile: {First Last}, Age: {calculated age}, Username: {first initial + last name + birth year}"