**Question 1: Creating Strings**

**Assign the phrase "Hello, World!" to a variable named greeting. How do you create a string in Python?**

Hint: Strings can be created by enclosing text in single (**'**) or double (**"**) quotes.

**Question 2: String Length Concept**

**How can you find out the number of characters in a string? Consider the string Python is fun!.**

Hint: Think about how you could count each character, including spaces, to determine the string's length.

**Question 3: Concatenating Strings**

**How do you join two strings together? Join the strings Hello and World with a space between them.**

Hint: You can use the **+** operator to add strings together, remembering to include spaces as needed.

**Question 4: Using Newline Characters**

**What special character is used to create a new line in a string? Demonstrate by creating a string that spans multiple lines.**

Hint: The newline character **\n** can be used within a string to move part of the string to a new line.

**Question 5: Accessing String Characters**

**How can you access a specific character in a string? Try to access the first character of the string Data.**

Hint: Each character in a string has an index, starting with 0 for the first character.

**Question 6: Understanding String Slicing**

**What is string slicing, and how can it be used to extract a portion of a string? Extract World from Hello, World!.**

Hint: String slicing involves specifying a range of indices to create a substring, using the syntax **[start:end]**.

**Question 7: Immutability of Strings**

**Can you change a character in a string once it has been created? Try to change Hello to Jello.**

Hint: Consider the property of strings regarding changes after their creation.

**Question 8: The Significance of Escape Characters**

**Besides \n, what are other escape characters, and what do they do? Give an example using \t (tab).**

Hint: Escape characters allow you to include special characters in a string that would otherwise be difficult to type directly.

**Question 9: String Concatenation Without Operators**

**Without using the + operator, how else might you combine strings in Python? Think about using string literals next to each other.**

Hint: Placing string literals next to each other in code will automatically concatenate them.

**Question 10: Incorporating Variables in Strings**

**Before the introduction of string formatting or f-strings, how could you include variables in strings? Create a string that includes the integer variable age = 25.**

Hint: Consider concatenation or converting numbers to strings with the **str()** function to include them in a string.