**Week 3 – Notes from the Lecture**

**Difference Between a String Variable and a String Literal**

- String Variable: A string variable is a variable that holds a string value, which can change or be reassigned throughout the program.

- Example:

```python

my\_string = "Hello, World!" # 'my\_string' is a string variable

- String Literal: A string literal is a fixed value of a string that is written directly in the code. It is not assigned to any variable (though it can be), and it cannot change since it represents a constant value within the code.

- Example:

```python

print("Hello, World!") # "Hello, World!" is a string literal

In short, a string literal is the actual string value, while a string variable is a named reference to that value.

**Three Ways to Specify a File Path in Python**

1. Absolute Path: The complete path starting from the root directory of the file system. It includes the full hierarchy of directories.

2. Relative Path: The path relative to the current working directory, meaning it does not start from the root but from the current directory where the Python script is being run.

3. Raw String (for Windows paths): To avoid escape sequences (like `\n` for newlines) in file paths, you can specify a raw string by prefixing the string with an `r`. This is especially useful for Windows file paths.

**Syntax for Calling a String Method**

The syntax for calling a string method is:

string\_variable.method\_name(arguments)