Assignment 6:

## Q1

Escape characters are special characters used in strings to represent certain characters or symbols that are difficult to include directly. Escape characters are preceded by a backslash (\) in Python.

Ex- \n: Represents a newline character. It is used to insert a line break.

## Q2

The escape character \n stands for a newline character, and the escape character \t stands for a tab character.

\n: It is used to insert a newline or line break in a string. When encountered in a string, it moves the cursor to the beginning of the next line.

\t: It is used to insert a horizontal tab or tabulation in a string. When encountered in a string, it adds horizontal spacing equivalent to a tab.

## Q3

To include a backslash character (\) in a string, we need to use the escape character \\. The double backslash represents a single literal backslash in the resulting string.

## Q4

The single quote character in the string "Howl's Moving Castle" is not causing a problem because the string itself is enclosed in double quotes ("). In Python, strings can be enclosed in either single quotes or double quotes, and they can contain the opposite type of quote character without causing any issues.

## Q5

Using triple quotes (''' or """) to create a multiline string, where line breaks are automatically preserved.

## Q6

'Hello, world!'[1] is 'e'.

'Hello, world!'[0:5] is 'Hello'.

'Hello, world!'[:5] is 'Hello'.

'Hello, world!'[3:] is 'lo, world!'.

## Q7

'Hello'.upper() is 'HELLO'.

'Hello'.upper().isupper() is True.

'Hello'.upper().lower() is 'hello'.

## Q8

'Remember, remember, the fifth of July.'.split() is ['Remember,', 'remember,', 'the', 'fifth', 'of', 'July.'].

'-'.join('There can only one.'.split()) is 'There-can-only-one.'.

## Q9

The rjust() method right-justifies a string, meaning that it pads the string with spaces on the left side until it reaches the specified width. The ljust() method left-justifies a string, meaning that it pads the string with spaces on the right side until it reaches the specified width. The centre() method centres a string, meaning that it pads the string with spaces on both the left and right sides until it reaches the specified width.

## Q10

The best way to remove whitespace characters from the start or end of a string is to use the strip() method. The strip() method removes leading (start) and trailing (end) whitespace characters from a string.