1. What are escape characters, and how do you use them?

Ans: Escape characters are special characters that are used to represent certain actions or characters that are difficult to type or represent in a string directly. They are preceded by a backslash \. For example, \n represents a newline character, \t represents a tab character, and \\ represents a literal backslash.

2. What do the escape characters n and t stand for?

Ans: n: Represents a newline character, which moves the cursor to the beginning of the next line.

t: Represents a tab character, which adds horizontal spacing and is often used for indentation.

3. What is the way to include backslash characters in a string?

Ans: To include a backslash character in a string, you need to use a double backslash \\. For example, "This is a double backslash: \\\\".

4. The string "Howl's Moving Castle" is a correct value. Why isn't the single quote character in the word Howl's not escaped a problem?

Ans: In Python, you can use single quotes ' ' to define a string as long as the string itself is enclosed in double quotes " ". Similarly, you can use double quotes " " within a string defined with single quotes. So, the single quote in "Howl's" is not an issue because the string itself is enclosed in double quotes.

5. How do you write a string of newlines if you don't want to use the n character?

Ans: You can use triple quotes ''' ''' or """ """ to create a string with newlines without using the n escape character.

6. What are the values of the given expressions?

'Hello, world!'[1] -> 'e'

'Hello, world!'[0:5] -> ‘Hello'

'Hello, world!'[:5] -> 'Hello'

'Hello, world!'[3:] -> 'lo, world!'

7. What are the values of the following expressions?

'Hello'.upper() -> 'HELLO'

'Hello'.upper().isupper() -> True

'Hello'.upper().lower() -> 'hello'

8. What are the values of the following expressions?

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

'-'.join('There can only one.'.split()) -> 'There-can-only-be-one.'

9. What are the methods for right-justifying, left-justifying, and centering a string?

Ans: Right-justifying: You can use the ‘str.rjust(width)’ method.

Left-justifying: You can use the ‘str.ljust(width)’ method.

Centering: You can use the ‘str.center(width)’ method.

10. What is the best way to remove whitespace characters from the start or end?

Ans: The str.strip() method is commonly used to remove leading and trailing whitespace characters from a string. If you only want to remove leading (start) or trailing (end) whitespace, you can use str.lstrip() or str.rstrip() respectively.