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

Escape characters are used to represent characters in a string that would otherwise be difficult or impossible to include directly. They start with a backslash \. For example, '\n' represents a newline character.

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

* '\n' represents a newline character.
* '\t' represents a tab character.

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

To include a backslash character in a string, you can escape it by using two backslashes, like this: '\\'.

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?

The single quote in the word "Howl's" is not a problem because the string is enclosed in double quotes. Python allows you to use single quotes within double-quoted strings and vice versa.

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

multiline\_string = '''This is line 1.

This is line 2.

This is line 3.'''

6. What are the values of the given expressions?

'Hello, world!'[1]

'Hello, world!'[0:5]

'Hello, world!'[:5]

'Hello, world!'[3:]

* 'Hello, world!'[1] returns 'e'.
* 'Hello, world!'[0:5] returns 'Hello'.
* 'Hello, world!'[:5] returns 'Hello'.
* 'Hello, world!'[3:] returns 'lo, world!'.

7. What are the values of the following expressions?

'Hello'.upper()

'Hello'.upper().isupper()

'Hello'.upper().lower()

* 'Hello'.upper() returns 'HELLO'.
* 'Hello'.upper().isupper() returns True because 'HELLO' is all uppercase.
* 'Hello'.upper().lower() returns 'hello' because the string is first made uppercase and then lowercase.

8. What are the values of the following expressions?

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

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

* 'Remember, remember, the fifth of July.'.split() splits the string into a list of words: ['Remember,', 'remember,', 'the', 'fifth', 'of', 'July.'].
* '-'.'-'.join('There can only one.'.split()) joins the words in the list with hyphens: 'There-can-only-one.'.

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

* Right-justifying: You can use the str.rjust(width) method to right-justify a string within a field of a specified width.
* Left-justifying: You can use the str.ljust(width) method to left-justify a string within a field of a specified width.
* Centering: You can use the str.center(width) method to center a string within a field of a specified width.

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

To remove leading and trailing whitespace characters (spaces, tabs, newlines), you can use the str.strip() method.