

Python Inbuilt Strings Assignment Answers

Q1. What is the purpose of the len() function in Python, and how can it be used with strings?

Answer: The len() function in Python returns the number of items in an object. When used with strings, it returns the number of characters in the string.

Ex: my_string = "Hello, world!"

```
length = len(my_string) print(length)
```

Q2. How can you concatenate two or more strings in Python, and can you provide an example of string concatenation?

Answer: Strings in Python can be concatenated using the + operator. You can also use the join() method for concatenation with a delimiter.

Ex: str1 = "Hello"

```
str2 = "World"
```

```
result = str1 + " " + str2
```

```
print(result)
```

Q3. What is string slicing in Python, and how can you extract a portion of a string using this method?

Answer: String slicing in Python allows you to extract a substring from a string using a range of indices. The syntax is string[start:stop], where start is the starting index and stop is the ending index.

Ex: my_string = "Hello, world!"

```
substring = my_string[7:12]
```

```
print(substring)
```

```
# Output: "world"
```

Q4. How can you change the case of a string in Python, and can you provide examples of both making a string all uppercase and all lowercase?

Answer: You can change the case of a string using the upper() and lower() methods.

To make a string all uppercase:

```
my_string = "Hello, World!"
```

```
uppercase_string = my_string.upper()
```

```
print(uppercase_string) # Output: "HELLO, WORLD!"
```

To make a string all lowercase:

```
my_string = "Hello, World!"
```

```
lowercase_string = my_string.lower()
```

```
print(lowercase_string)
```

Q5. What does the `split()` method do in Python, and how can you split a string using a specific delimiter?

Answer: The `split()` method in Python splits a string into a list of substrings based on a specified delimiter. If no delimiter is provided, it splits by whitespace.

Ex: `data = "apple,orange,banana"`

```
fruits = data.split(',')
```

```
print(fruits)
```