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

The len() function in Python returns the length of an object, which is the number of elements it contains. When used with strings, it returns the number of characters in the string, including spaces and punctuation.

In [1]:
```
string = "Hello, world!"
string_length = len(string)
print(string_length)
```

```
13
```

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

In [9]:
```
string1 = "Hello"
string2 = "World"

string1+", "+string2
```

Out[9]:
```
'Hello, World'
```

In [3]:
```
string1 = "I"
string2 = "Love"
string3 = "You"

string1+" "+string2+" "+string3
```

Out[3]:
```
'I Love You'
```

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

String slicing is a powerful technique that allows you to easily extract portions of strings in Python. It is widely used in various string manipulation tasks such as extracting substrings, formatting strings, and removing unwanted characters.

In [1]:
```
string1 = "Hello world of Python"
```

In [3]:
```
string1[0:12]
```

Out[3]:
```
'Hello world'
```

In [4]:
```
string1[::-1]
```

Out[4]:
```
'dlrow olleH'
```

In [9]:
```
string2 = "Pwskills"
```

In [13]:
```
string2[-1]
```

Out[13]:
```
's'
```

In [15]:
```
string2[-3:]
```

Out[15]:
```
'lls'
```

In [16]:
```
string2[:-3]
```

Out[16]: 'Pwski'

In [17]:
```
string2[::1]
```

Out[17]: 'Pwskills'

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?

In [18]:
```
# we can the hcange the case of strings by using inbuilt function called .lower
```

In [20]:
```
text = "HELLO WORLD"
text.lower()
```

Out[20]: 'hello world'

In [21]:
```
text = "i love you"
text.upper()
```

Out[21]: 'I LOVE YOU'

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

In [22]:
```
#Split methond is used to split the string according to information proided with
```

In [1]:
```
data = "Ranjan, data analyst, teacher"
```

In [2]:
```
data
```

Out[2]: 'Ranjan, data analyst, teacher'

In [3]:
```
teacher_info = data.split(',')
```

In [4]:
```
teacher_info
```

Out[4]: ['Ranjan', ' data analyst', ' teacher']

In [5]:
```
name = teacher_info[0]
subject = teacher_info[1]
des = teacher_info[2]
```

In [6]:
```
name.split()
```

Out[6]: ['Ranjan']

In [7]:
```
subject.split()
```

Out[7]: ['data', 'analyst']

In [8]:
```
des.split()
```

Out[8]: ['teacher']

In [ ]:

In [ ]: