In [1]:
```python
# 1. String Slicing
string = "Learn Python Programming"
word_positive = string[6:12]
print(word_positive)
word_negative = string[-17:-11]
print(word_negative)
```

```
Python
ython
```

In [2]:
```python
# 2. Find the Length
string = "Welcome to Python!"
length = len(string)
print(length)
```

```
18
```

In [3]:
```python
# 3. Change Case
string = "python IS Awesome"
uppercase = string.upper()
print(uppercase)
lowercase = string.lower()
print(lowercase)
capitalized = string.capitalize()
print(capitalized)
```

```
PYTHON IS AWESOME
python is awesome
Python is awesome
```

In [4]:
```python
# 4. Remove Whitespace
string = "      Clean this string   "
cleaned_string = string.strip()
print(cleaned_string)
```

```
Clean this string
```

In [5]:
```python
# 5. Substring Replacement
sentence = "I love Java programming."
new_sentence = sentence.replace("Java", "Python")
print(new_sentence)
```

```
I love Python programming.
```

In [6]:
```python
# 6. Check Substring
string = "Learn Python Programming"
substring = "Python"
if substring in string:
    print(f"The word '{substring}' is present in the string.")
else:
    print(f"The word '{substring}' is not present in the string.")
```

```
The word 'Python' is present in the string.
```

In [7]:
```python
# 7. Startswith and Endswith
filename = "report.pdf"
starts_with = filename.startswith("report")
print(starts_with)
ends_with = filename.endswith(".pdf")
print(ends_with)
```

```
True
True
```

In [8]:
```python
# 8. Find Substring Position
string = "Welcome to Python programming"
position = string.find("to")
print(position)
```

```
8
```

In [9]:
```python
# 9. Alphabet or Number Check
string = "12345abc"
if string.isalpha():
    print("The string contains only alphabetic characters.")
elif string.isdigit():
    print("The string contains only numeric characters.")
else:
    print("The string contains both alphabetic and numeric characters.")
```

```
The string contains both alphabetic and numeric characters.
```

In [10]:
```python
# 10. Extract Substring with Step
string = "abcdefg"
substring_with_step = string[::2]
print(substring_with_step)
```

```
aceg
```

In [ ]: