practicals-1

February 3, 2025

[1]:
```python
# Remove digits from the string
text = "Hello123, I have 456 apples."
clean_text = ''.join(char for char in text if not char.isdigit())
print("Text without digits:", clean_text)
```

```
Text without digits: Hello, I have  apples.
```

[2]:
```python
# Check if a word exists in a sentence (case-insensitive)
text = "Python programming is fun"
word = "python"
if word.lower() in text.lower():
    print(f"The word '{word}' is found in the sentence.")
else:
    print(f"The word '{word}' is not found in the sentence.")
```

```
The word 'python' is found in the sentence.
```

[2]:
```python
# Count the frequency of each word in the string
text = "hello hello world world world"
words = text.split()
word_count = {}
for word in words:
    word_count[word] = word_count.get(word, 0) + 1
print("Word Frequency:", word_count)
```

```
Word Frequency: {'hello': 2, 'world': 3}
```

[4]:
```python
# Extract all uppercase letters from the string
text = "This Is A Sample TEXT"
upper_letters = ''.join(char for char in text if char.isupper())
print("Uppercase Letters:", upper_letters)
```

```
Uppercase Letters: TIASTEXT
```

[5]:
```python
# Find the number of sentences in a text
text = "Hello world. How are you? I am fine."
sentences = text.split('. ')
sentence_count = len(sentences)
```

```
print("Number of Sentences:", sentence_count)
```

```
Number of Sentences: 2
```

[6]:
```
# Find the longest word in the sentence
text = "Python is a powerful programming language"
words = text.split()
longest_word = max(words, key=len)
print("Longest Word:", longest_word)
```

```
Longest Word: programming
```

[7]:
```
# Remove punctuation from text
text = "Hello, world! Let's learn text analytics."
clean_text = ''.join(e for e in text if e.isalnum() or e.isspace())
print("Text without Punctuation:", clean_text)
```

```
Text without Punctuation: Hello world Lets learn text analytics
```

[8]:
```
# Reverse the order of words in a string
text = "Python programming is fun"
reversed_text = ' '.join(text.split()[::-1])
print("Reversed Words:", reversed_text)
```

```
Reversed Words: fun is programming Python
```

[9]:
```
# Find the position of a word in a sentence
text = "I am learning Python programming"
word = "Python"
position = text.find(word)
if position != -1:
    print(f"The word '{word}' is at position {position}.")
else:
    print(f"The word '{word}' is not found in the sentence.")
```

```
The word 'Python' is at position 14.
```

[10]:
```
# Check if the sentence starts with a specific word
text = "Python is great for programming."
word = "Python"
if text.startswith(word):
    print(f"The sentence starts with '{word}'.")
else:
    print(f"The sentence does not start with '{word}'.")
```

```
The sentence starts with 'Python'.
```

[11]:
```python
# Remove extra spaces between words
text = "This   is   a    text     with   extra spaces."
clean_text = ' '.join(text.split())
print("Clean Text:", clean_text)
```

```
Clean Text: This is a text with extra spaces.
```

[12]:
```python
# Find all unique words in a text
text = "Python Python programming is fun fun"
words = text.split()
unique_words = set(words)
print("Unique Words:", unique_words)
```

```
Unique Words: {'fun', 'Python', 'is', 'programming'}
```

[13]:
```python
# Extract digits from a text
text = "User123 has 45 years of experience."
digits = ''.join(char for char in text if char.isdigit())
print("Digits in the Text:", digits)
```

```
Digits in the Text: 12345
```

[ ]:
```python

```