

```

1 import re
2
3 def replace_punctuation(text):
4     return re.sub(r'[.,:]', ':', text)
5
6 sample_text = 'Python Exercises, PHP exercises.'
7 result = replace_punctuation(sample_text)
8 print(result)

```

Python:Exercises::PHP:exercises:

```

1 import pandas as pd
2 import re
3
4 def clean_text(text):
5     return ' '.join(re.findall(r'\b[a-zA-Z]+\b', text))
6
7 data = {'SUMMARY': ['hello, world!', 'XXXXX test', '123four, five;; six...']}
8
9 df = pd.DataFrame(data)
10
11 df['SUMMARY'] = df['SUMMARY'].apply(clean_text)
12
13 print(df)

```

```

SUMMARY
0  hello world
1  XXXXX test
2    five six

```

```

1 import re
2
3 def find_long_words(text):
4     pattern = re.compile(r'\b\w{4,}\b')
5     return pattern.findall(text)
6
7 sample_text = "This is a sample sentence with some long and short words"
8 result = find_long_words(sample_text)
9 print(result)

```

['This', 'sample', 'sentence', 'with', 'some', 'long', 'short', 'words']

```

In [4]: 1 import re
2
3 def find_long_words(text):
4     pattern = re.compile(r'\b\w{4,}\b')
5     return pattern.findall(text)
6
7 sample_text = "This is a sample sentence with some long and short words"
8 result = find_long_words(sample_text)
9 print(result)

```

['This', 'sample', 'sentence', 'with', 'some', 'long', 'short', 'words']

```

In [5]: 1 import re
2
3 def find_specific_length_words(text):
4
5     pattern = re.compile(r'\b\w{3,5}\b')
6
7     matches = pattern.findall(text)
8
9     return matches
10
11 sample_text = "The quick brown fox jumps over the lazy dog"
12 result = find_specific_length_words(sample_text)
13 print(result)

```

['The', 'quick', 'brown', 'fox', 'jumps', 'over', 'the', 'lazy', 'dog']

```

1 import re
2
3 def remove_parentheses(string_list):
4
5     pattern = re.compile(r'\s*\([^)]*\s*')
6
7
8     def clean_string(s):
9         return pattern.sub('', s).strip()
10
11
12     return [clean_string(s) for s in string_list]
13
14 sample_text = [
15     "example (.com)",
16     "hr@fliprobo (.com)",
17     "github (.com)",
18     "Hello (Data Science World)",
19     "Data (Scientist)"
20 ]
21
22 result = remove_parentheses(sample_text)
23
24 for item in result:
25     print(item)

```

```

example
hr@fliprobo
github
Hello
Data

```

```

1 import re
2 import ast
3
4 sample_text = ["example(.com)", "hr@fliprobo(.com)", "github(.com)", "Hello(Data Science World)", "Data(Scientist)"]
5
6 with open('sample_text.txt', 'w') as file:
7     file.write(sample_text)
8
9 def remove_parentheses_from_file(filename):
10     with open(filename, 'r') as file:
11         content = file.read()
12
13     string_list = ast.literal_eval(content)
14
15     pattern = re.compile(r'\s*\([^)]*\s*')
16
17     result = [pattern.sub('', s).strip() for s in string_list]
18
19     return result
20
21 result = remove_parentheses_from_file('sample_text.txt')
22 print(result)

```

```
['example', 'hr@fliprobo', 'github', 'Hello', 'Data']
```

```

1 import re
2
3 text = "ImportanceOfRegularExpressionsInPython"
4 result = re.findall('[A-Z][^A-Z]*', text)
5
6 print(result)

```

```
['Importance', 'Of', 'Regular', 'Expressions', 'In', 'Python']
```

```

1 import re
2
3 def insert_spaces(text):
4
5     pattern = r'(\d+)([A-Za-z]+)'
6     result = re.sub(pattern, r'\1 \2', text)
7     return result
8
9 text = "RegularExpression1IsAn2ImportantTopic3InPython"
10 output = insert_spaces(text)
11 print(output)

```

RegularExpression1 IsAn2 ImportantTopic3 InPython

```

1 import re
2
3 def insert_spaces(text):
4
5     pattern = r'([A-Z][a-z0-9]+|\d+)'
6
7     result = re.sub(pattern, r' \1', text)
8
9     result = result.strip()
10    return result
11
12 sample_text = "RegularExpression1IsAn2ImportantTopic3InPython"
13 output = insert_spaces(sample_text)
14 print(output)

```

Regular Expression1 Is An2 Important Topic3 In Python