**Python: Unit-2/Lab ex. 3**

**CODE:**

import re

def process\_text(text):

# 1. re.match(): Check if the text starts with the word "Hello".

if re.match(r'^Hello', text):

print("The text starts with 'Hello'.")

else:

print("The text does not start with 'Hello'.")

# 2. re.search(): Find the first occurrence of the word "world" in the text.

if re.search(r'world', text, re.IGNORECASE):

print("The word 'world' is found in the text.")

else:

print("The word 'world' is not found in the text.")

# 3. re.findall(): Find all words that start with a capital letter.

capital\_words = re.findall(r'\b[A-Z][a-z]\*\b', text)

if capital\_words:

print("Words that start with a capital letter:", capital\_words)

else:

print("No words start with a capital letter.")

# 4. re.sub(): Replace all occurrences of the word "Python" with "Java".

modified\_text = re.sub(r'Python', 'Java', text)

print("Modified text:", modified\_text)

# Example usage

text = "Hello, world! Welcome to the Python programming language. Python is great for beginners and experts alike."

process\_text(text)

**OUTPUT:**

