

Task:-2

Code Snippet :-1

```
def count_word_frequencies(text):
    words = text.split()
    word_freq = {}
    for word in words:
        word=word. Strip("!.;\"'(){}[]")
        word=word.lower()
        if word in word_freq:
            word_freq[word] += 1
        else:
            word_freq[word] = 1
    return word_freq

if __name__ == "__main__":
    text = "hi i am dev."
    frequencies = count_word_frequencies(text)
    print("Word frequencies:")
    for word, freq in frequencies.items():
        print(f"{word}: {freq}")
```

Code Snippet:-2

```
def is_palindrome(word):
    cleaned_word = ''.join(char.lower() for char in word if char.isalnum())
    return cleaned_word == cleaned_word[::-1]

if __name__ == "__main__":
    word = input("Enter a word to check if it is a palindrome: ")
    if is_palindrome(word):
        print(f"'{word}' is a palindrome.")
    else:
        print(f"'{word}' is not a palindrome.")
```

Code Snippet:-3

```
numbers = [1, 2, 3, 4, 5]

def print_squares(numbers):
    for number in numbers:
        print(f"The square of {number} is {number ** 2}")

if __name__ == "__main__":
    print_squares(numbers)
```