Irs lab1

```python
from sklearn.feature_extraction.text import TfidfVectorizer

from sklearn.metrics.pairwise import cosine_similarity

def compute_similarity(documents):

"""

Computes the similarity between documents using the Vector Space Model

and Cosine Similarity.

Args:

documents: A list of strings, where each string is a document.

Returns:

A list of similarity scores between each document pair.

"""

# 1. Text Preprocessing and Vectorization

vectorizer = TfidfVectorizer()

vectors = vectorizer.fit_transform(documents)

# 2. Calculate Cosine Similarity

similarity_matrix = cosine_similarity(vectors)

# 3. Return Similarity Scores

return similarity_matrix

# Example Usage

documents = [
```

```python
    "This is the first document.",

    "This document is the second document.",

    "And this is the third one.",

    "Is this the first document?"

]

similarity_scores = compute_similarity(documents)

print(similarity_scores)
```