

## [DAY-26 2211cs020196]Coding Exercise: Text Similarity Techniques Write a Python program to calculate the cosine similarity between two strings using the Scikit-learn library. You can use the 'TfidfVectorizer' class to transform the text into vectors.

```
In [1]: 1 from sklearn.feature_extraction.text import TfidfVectorizer
2 from sklearn.metrics.pairwise import cosine_similarity
3 string1 = "Once upon a time in a small village, there lived a young girl nam
4 string2 = "Alice loved exploring the woods and discovering new things."
5 vectorizer = TfidfVectorizer()
6 tfidf_matrix = vectorizer.fit_transform([string1, string2])
7 cosine_sim = cosine_similarity(tfidf_matrix[0:1], tfidf_matrix[1:2])
8 print(f"Cosine Similarity: {cosine_sim[0][0]}")
```

Cosine Similarity: 0.051171029771728015

```
In [ ]: 1
```