

ASSINMENT # 02

TASK # 01

Given a set of documents, how can you create a binary representation where each word is represented as a binary feature (1 for presence, 0 for absence)?

Question: Write a Python script to perform One-Hot Encoding on the following documents:

"I love programming in Python."

"Python programming is fun."

"I love learning new languages."

Display the result in a tabular format with rows representing documents and columns representing words.

TASK # 02

Given a set of documents, create a frequency-based representation where each word is represented by its count in the document. Analyze the frequency of words that appear more than once.

Question: Write a Python script to perform Bag of Words with frequency counting on the following documents:

"Data science is fun. Data science involves statistics and coding."

"Coding is an essential skill for data science."

"Statistics and data analysis are crucial for data science."

Display the result in a tabular format showing the frequency of each word in each document. Make sure to highlight words that appear more than once within each document and across documents.