ADDRESS PREDICTION USING NLP

PROBLEM STATEMENT:

We have an address inventory system named 'O2 cache' which consists of addresses to which fiber connections can be provided. In the current system, we are experiencing fallout due to difficulties in accurately mapping the customer-addresses entered with those in the 'O2 cache

DESCRIPTION:

The address inventory system, known as "O2 cache," serves as a repository for addresses eligible for fiber connection provisioning. The exsisting system matches the address using fuzzy-based logic and there are few address which are not getting matched though there are corresponding addresses in the O2 cache which is causing address fallout. So the need is to create an intelligent system based on AI and ML model to map customer provided address accurately without causing any fallout.

PROPOSED SYSTEM:

Develop an intelligent system that can identify the closest address match which can drop the address fallout to greater extend.

- The customer enters the address in Q.com and these addresses are need to be matched again the O2 cache
- We are replacing the numbers and alphanumeric character with unique words
- All the addresses in the inventory are vectorized using Sentence BERT and saved as a pickle file
- The customer entered address are converted into vector using Sentence BERT and then we are finding the similarity using cosine similarity between them.
- The closest address match will have the highest cosine similarity