1. Explain Minimum Edit Distance or what do mean by Minimum Edit Distance in NLP.
2. Explain Tokenization and segmentation.
3. Describe the need for smoothing in N-gram models. provide an example of specific smoothing technique
4. Define TF-IDF and explain its significance in Information Retrieval.
5. Discuss the role of Hidden Markov Models (HMMs) in part-of-speech tagging.
6. Discuss two commonly used metrics for evaluating the performance of Named Entity Recognition systems.
7. Define multinomial logistic regression and explain its application in text classification.
8. Define gradient descent and its role in optimizing models. How does gradient descent help in adjusting the parameters of a text classification model to minimize the loss function?
9. Define Simple Recurrent Networks and explain their has it architecture. What is the main imitation of SRNs in handling long-term dependencies?
10. Explain the Idea behind Masked Language Models (MLMs) in the context of pretraining language models.
11. Define Conditional Random Fields (CRF) and explain their use in sequence labeling tasks.
12. Explain the concept of Word2vec and how the represents words in vector space. Discuss one application where Word2vec has shown significant improvement over traditional methods.
13. Define Conditional Random Fields (CRF) and explain their use in sequence labeling tasks. How does CRF differ from other sequence labeling methods, such as HMM?
14. Define multinomial logistic regression and explain its application in text classification. Provide an example scenario where multinomial logistic regression is preferable over binary logistic regression.

----------ALL THE BEST----------