**Question 1:** Sentiment Analysis with Transformers

Dataset Problem: Use the IMDB movie reviews dataset to perform sentiment analysis using a Transformer model. load the dataset from TensorFlow datasets library and solve the problem.

Due to the complexity and size of Transformer models, use via libraries like Hugging Face's Transformers and work it out, feel free to experiment with more than 1 transformer model and compare the results and give a short explanation on the best model, what are the reasons for its performance.

**Question 2:** Text Generation with Transformers

Dataset Problem: Using a pre-trained GPT model (any version) from Hugging Face's Transformers, generate a short story based on a given prompt. Example prompt is below

Prompt=” In a distant future, humanity has discovered”