Compulsory Task 1

● In a file called nlp_1.pdf, categorise which type of NLP application applies for each of the following use-cases: (Use the categories we have discussed on this bootcamp so far) a. A model that allocates which mail folder an email should be sent to (work, friends, promotions, important), like Gmail's inbox tabs. b. A model that helps decide what grade to award to an essay question. This can be used by a university professor who grades a lot of classes or essay competitions. c. A model that provides assistive technology for doctors to provide their diagnosis. Remember, doctors ask questions, so the model will use the patients' answers to provide probable diagnosis for the doctor to weigh and make decisions

a. A model that allocates which mail folder an email should be sent to (work, friends, promotions, important), like Gmail's inbox tabs. - This model belongs is a classic application of the Text Classification category whereby NLP is used to organise, structure and categorise any kind of text.

b. A model that helps decide what grade to award to an essay question. This can be used by a university professor who grades a lot of classes or essay competitions. - This type of model is an example of an AES model (Automatic Essay Scoring). AES use Natural Language Processing to make complex text analyses examining spelling, punctuation, word usage and choice, sentence structure, subject relevance, cohesion, coherence, clarity etc. solving a statistical classification problem. The essay is also graded by analysing its capacity to convince the reader of the validity of its arguments. I think that if we are to use what we have discussed in this boot camp so far we can say that Text Classification and Sentiment Analysis are the appropriate categories for this model.

c. A model that provides assistive technology for doctors to provide their diagnosis. Remember, doctors ask questions, so the model will use the patients' answers to provide probable diagnosis for the doctor to weigh and make decisions. - This model is an example of an NLP Question Answering application (currently an extremely relevant and controversial "hot" topic due to the emergence of the AI chatbot ChatGPT in Nov 2022).