- a. A model that allocates which mail folder an email should be sent to (work, friends, promotions, important), like Gmail's inbox tabs.

This is a text classification application. Text classification is a type of NLP task that involves assigning a category to a piece of text. In this case, the model would be trained on a dataset of emails that have already been classified into one of the four categories (work, friends, promotions, important). Once the model is trained, it can be used to classify new emails.

- 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 is a text scoring application. Text scoring is a type of NLP task that involves assigning a score to a piece of text. In this case, the model would be trained on a dataset of essays that have already been graded by human graders. Once the model is trained, it can be used to score new essays.

- 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 is a question answering application. Question answering is a type of NLP task that involves answering a question posed in natural language. In this case, the model would be trained on a dataset of medical questions and answers. Once the model is trained, it can be used to answer new medical questions.