Bytelearn NLP Challenge

### Problem statement

Build a webAPI endpoint where users can post a word problem in plain text and get back a json format response that contains:

1. Number of entities found
2. Type and value of the entities found in the word problem
3. Location of detected entities

Details:

* The expected word problem text input will contain a math problem that can be expressed as a linear equation.
* From the given input, you will have to define and extract the relevant entities.
* Sample inputs can be found in the data directory
* You are free to collect any additional data or use any open source resource to help you with this problem
* Your API will be tested with similar inputs as provided in the data directory
* Your API should be able to handle unexpected input
* You are expected to provide detailed comments for your code.

Extra Credit:

* What are the most commonly occuring entities in given word problems? Can you identify a pattern here?
* Can you formulate an equation from the word problem?
* Is there a solution to the given problem? Can you find that value?
* We know you are a superstar. Do not hold back. Show Off your skills

Output (Deliverables):

1. Share the API Endpoint and a verifiable CURL post command
2. A screen capture video showing that the API is working
3. Well-commented source code as a jupyter/google colab/R notebook along with any figures or analysis
4. A one-page write-up detailing the challenges faced, how you overcame those, and reference links used.

All the Best!