**Question 1:** What are some of the use cases for GenAI using Large Language Models, we completed using IBM watsonx?

**Response:**

1. Natural language translation.
2. Summarization.
3. Question answering.
4. Text completion.

**Question 2:** What are the pros and cons of doing Language Translation with (legacy) deep learning tools like IBM Language Translation cloud service vs GenAI tools like IBM watsonx or OpenAI ChatGPT? (Reference: <https://lokalise.com/blog/machine-translation-vs-ai-for-translation/>)

**Response:**

1. **Pros of legacy translation tools**:
   1. Translates a high amount of content with less time.
   2. Free and open source (Ex. Google translation).
2. **Cons of legacy translation tools**:
   1. Not very great at low-resource languages.
   2. Have issues in translating complex information such as idioms and cultural nuances.
3. **Pros of GenAI tools**:
   1. Can perform tasks other than translation.
   2. It learns based on the data that is fed to it and becomes better at translating in the future.
   3. It can translate complex content and low-resource language better.
4. **Cons of GenAI tools**:
   1. GenAI tools stores the data, which is problematic for sensitive data.
   2. When accuracy is so important in specific fields such as medicine, this is not very great.

**Question 3:** Visit the CU Art Museum and select a piece of art that you will translate to a foreign language using either technology learned in this module, share a link to your Jupyter notebook.

**Response:**

I visited CU museum and selected the following paragraph describing art. I took the first line and used watsonx to do the translation. The path to the jupyter notebook is “STAT-5360/Assignment-1/Translate\_CUmuseum\_monk.ipynb”.

“A standing Buddhist monk is offered a lotus flower by kneeling figure, dressed to depict a member of a lower rank. The gift of a simple blossom encourages viewers to make offerings out of faith and an earnest desire to support the Buddhist community. The painting is part of a larger series of illustrations depicting proper moral behavior, ritual offerings, and the effects of poor choices.”