Homework 4 (Group Task) *

- Due Oct 29 by 11:59pm
- Points 100
- · Submitting a file upload
- Available Oct 5 at 12am Oct 29 at 11:59pm

This assignment was locked Oct 29 at 11:59pm.

Greetings Students,

For **Homework 4**, your task is to fine-tune the **'meta-Ilama/Llama-2-7b-hf'** model on the training set of the **GSM8K dataset ('openai/gsm8k')**. After completing the training, you will need to evaluate the model's performance on the GSM8K test set by reporting the accuracy based on the exact match of the final answers.

You can train the model using the GPUs provided by ASU's Sol. You can get more information on Sol at https://asurc.atlassian.net/wiki/spaces/RC/pages/1852637228/The+Sol+supercomputer)

Submission Guidelines:

Please adhere to the following instructions and ensure your submission is a PDF or Word file (one submission per team). Include both the **fine-tuning script(.py)** and the **evaluation script(.py)** along with your **report**.

The report should consist of the following,

- 1. Screenshot of a sample data point from the training set.
- 2. **Screenshot of the commands** used to run your training script on Sol, including the beginning of the training outputs (ensure the screenshot displays the ASU user ID of one of your team members, as shown in the below image).

```
(base) [aravik13@sol-login02:/scratch/aravik13]$
```

- 3. **Explanation of the training script**, where each member should explain a portion(a functionality in the training process) and include their name next to their explanation.
- 4. **Accuracy metric** after evaluating your model on the test set.
- Screenshots of Train Loss and Validation Loss curves from WandB (Weights&Biases) and a short explanation about it.