extract_lengths_gens

December 30, 2025

```
[5]: import datasets
     import numpy as np
     import matplotlib.pyplot as plt
     import pathlib
     import transformers
```

```
[ ]: from datasets.utils.logging import disable_progress_bar
     disable_progress_bar()

     t = transformers.AutoTokenizer.from_pretrained("HuggingFaceTB/SmolLM2-1.7B")

     folders = list(pathlib.Path().glob("lambda1*"))
     by_folder = {}
     for folder in folders:
         parquets = list(folder.glob("**/*.parquet"))
         folder_key = folder.parts[0]
         by_folder[folder_key] = {}

         parquets_and_epochs = [(parquet, int(parquet.parent.parent.name.
      ↪split("_")[-1])) for parquet in parquets]
         parquets_and_epochs.sort(key=lambda x: x[1])

         for parquet, epoch_no in parquets_and_epochs:
             print(parquet, epoch_no)
             array = datasets.load_dataset("parquet", data_files=[str(parquet)])
             a = array["train"].map(lambda x: {"cont_tokens": np.
      ↪array(eval(x["cont_tokens"]))[0][0].shape[0]}, )
             mean = np.mean(a["cont_tokens"])
             by_folder[folder_key][epoch_no] = mean

         plt.plot(by_folder[folder_key].keys(), by_folder[folder_key].values())
         plt.title(folder_key)
         plt.show()
```
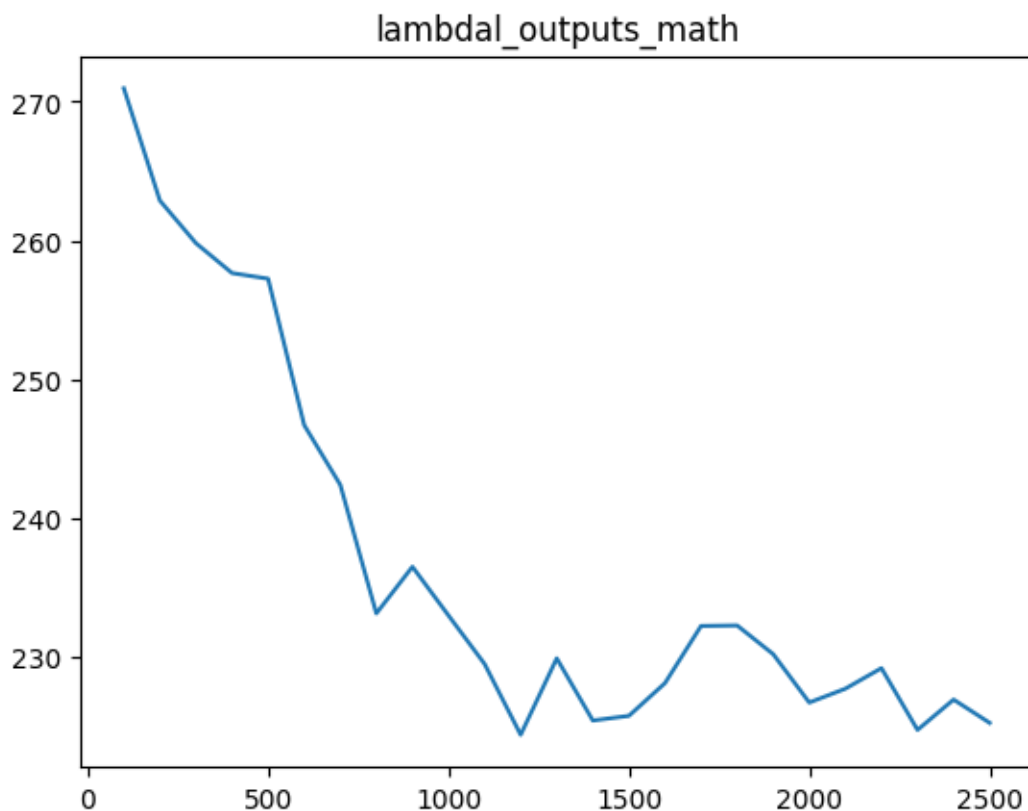
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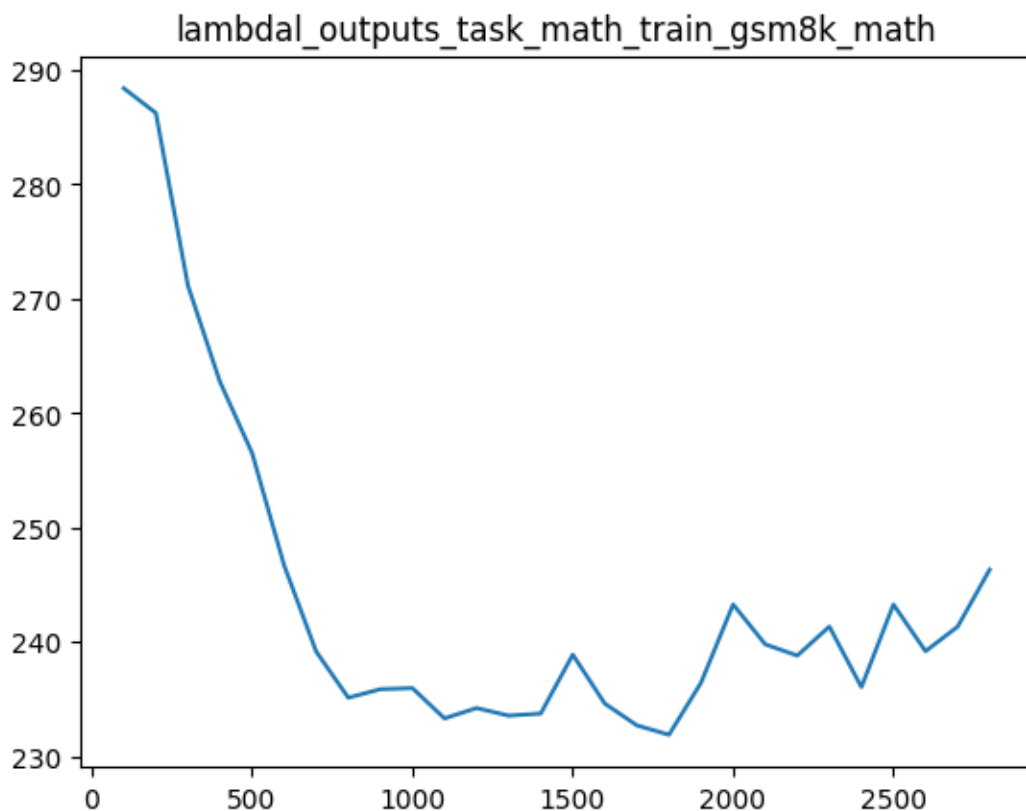25.949994/details_custom|math|5_2025-02-17T05-30-25.949994.parquet 1300

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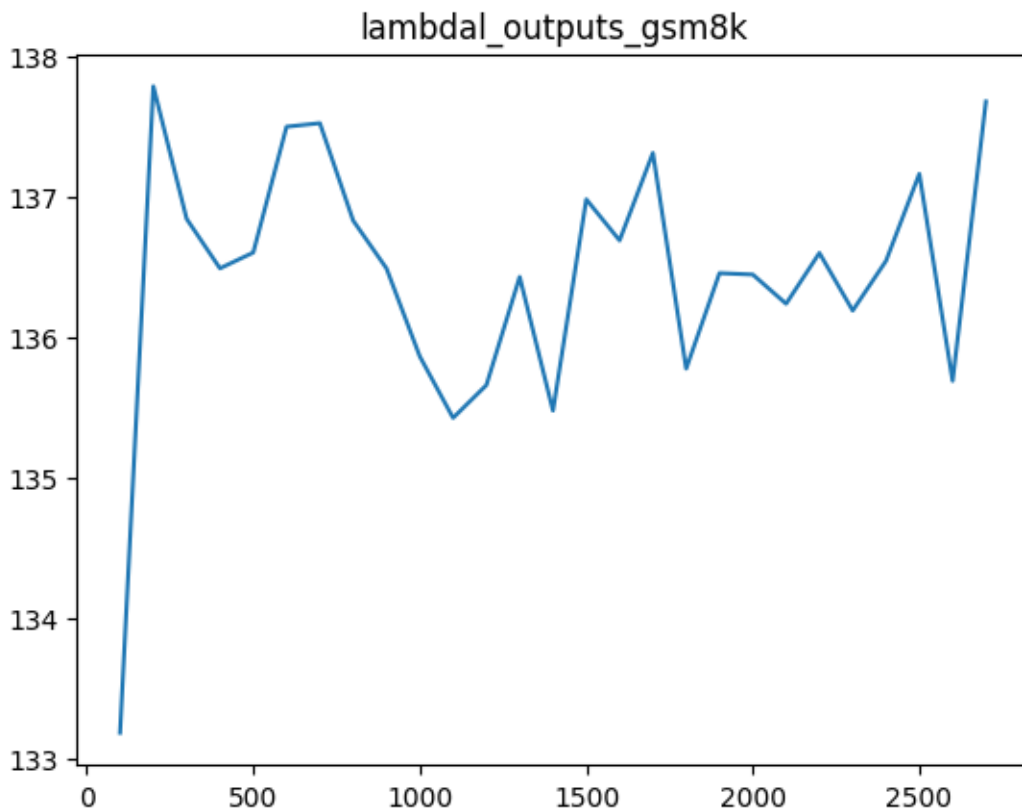
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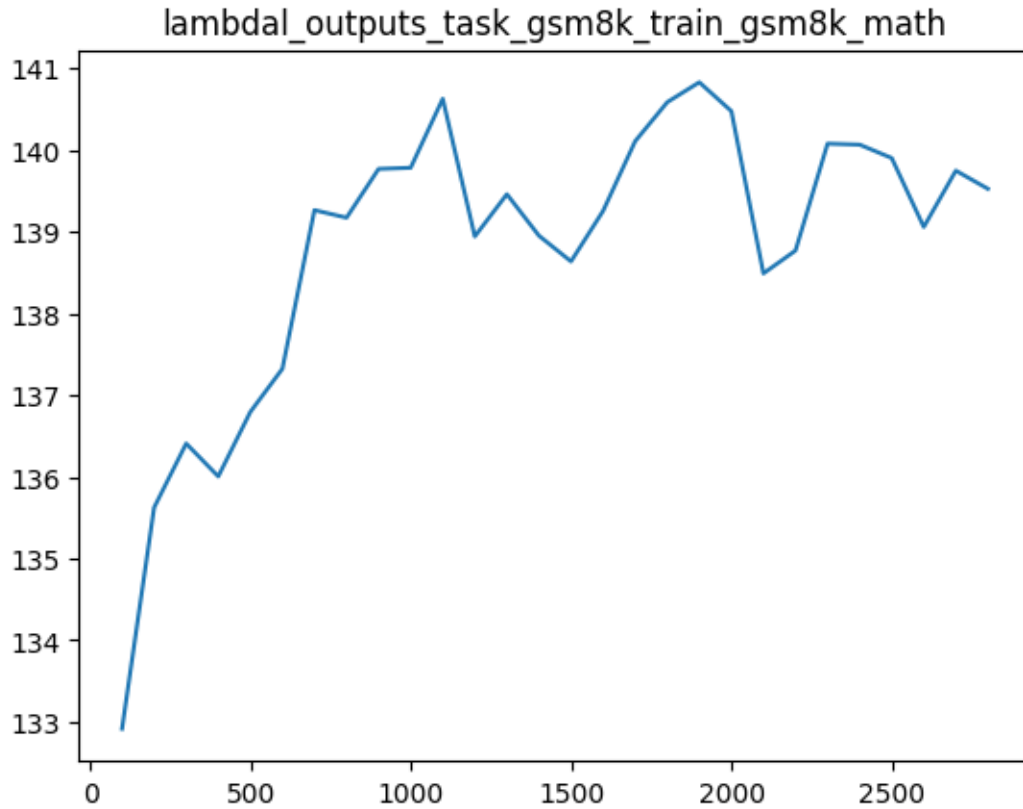lambdal_outputs_gsm8k/details/_network_scratch_g_gagnonju_lambdal_marglicot_open

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lambda1_outputs_task_gsm8k_train_gsm8k_math

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[42]: format_ = "Accuracy on {inference_task}, Trained on {training_task}"

titles = {
    "lambda1_outputs_gsm8k": format_.format(inference_task="GSM8K",
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}

order =

fig, axes = plt.subplots(2, 2, figsize=(12, 8))
axes = axes.flatten()

for i, folder_key in enumerate(by_folder):
```
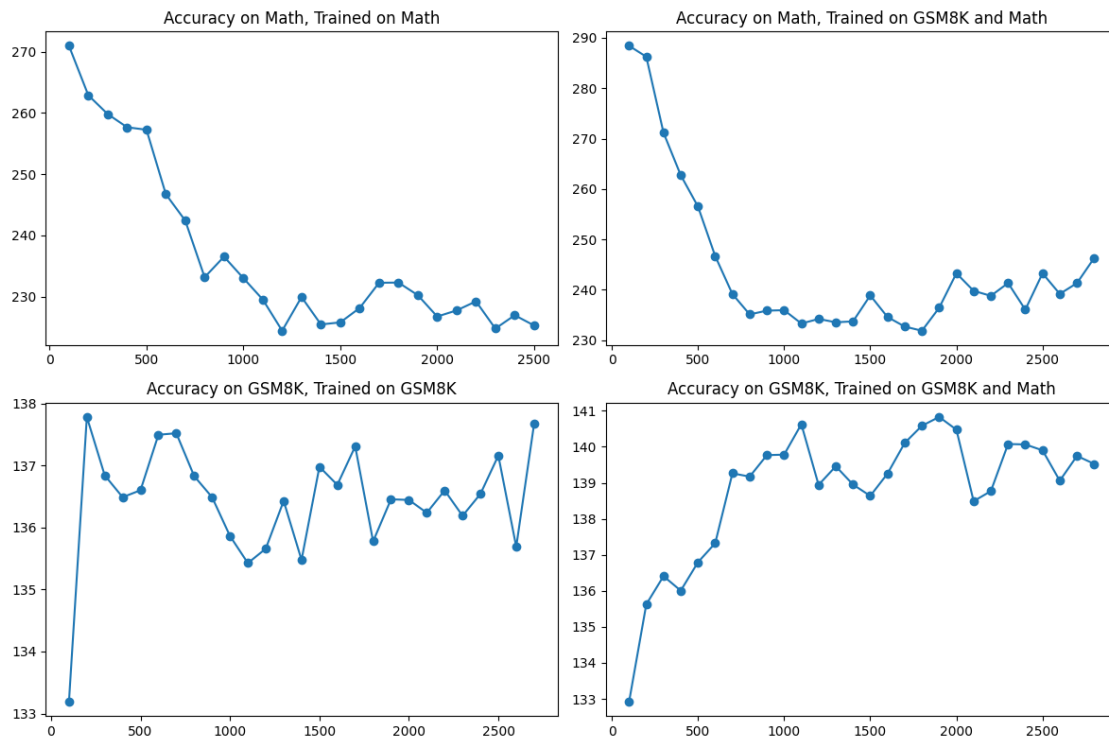
```
    axes[i].plot(by_folder[folder_key].keys(), by_folder[folder_key].values(),␣
 ↪marker='o')
    title = titles[folder_key]
    axes[i].set_title(title)

plt.tight_layout()
plt.show()
```