

182-final-project-technical-report

December 7, 2023

1 Enhancing Structured Narrative Generation in Language Models: A Fine-Tuning Approach Utilizing Classic Short Stories

1.1 Abstract

Storytelling is a fundamental human activity instrumental in communication and culture. Recent advancements in large language models (LLMs) have opened new possibilities in automated story generation. This project explores the fine-tuning of LLMs for dynamic and personalized story generation, capable of integrating user preferences into a coherent narrative structure inspired by classic short stories.

1.2 Introduction

Incorporating the intricacies of human storytelling into machine learning models presents a complex challenge—a challenge that, if addressed, can transform how we interact with and consume stories. By tailoring narratives to individual user preferences, we aim to create a new dimension of engagement. Leveraging Llama 2 as the base model, this project aims to fine-tune this model by using differentiating techniques that augment their generative storytelling capabilities.

1.3 Methodology

We grounded our approach in parameter-efficient fine-tuning techniques, primarily focusing on quantized Learning Rate Annealing (qLoRA). A data-driven curriculum was developed to sequentially introduce the model to various facets of storytelling through a large dataset. User preferences are encoded using meta-data tags and injected into the model as conditional elements guiding the generation process.

1.4 Experiments

We conducted a series of experiments aimed at evaluating model performance of Llama 2 versus Mistral, and in comparing these two, we found that Mistral had an unsupportable compute power and thus we decided on using Llama 2 as our base model.

```
[1]: !pip install -q accelerate==0.21.0 peft==0.4.0 bitsandbytes==0.40.2
      ↪ transformers==4.31.0 trl==0.4.7 datasets textstat
```

```
[2]: import os
      import torch
      from datasets import load_dataset
```

```

from transformers import (
    AutoModelForCausalLM,
    AutoTokenizer,
    BitsAndBytesConfig,
    HfArgumentParser,
    TrainingArguments,
    pipeline,
    logging,
)
from peft import LoraConfig, PeftModel, get_peft_model, \
    prepare_model_for_kbit_training
from trl import SFTTrainer

```

2 Training Configuration

Below is the training configuration for our [Llama 2](#) model.

The training leverages [QLoRA](#), an efficient fine-tuning method that significantly reduces memory usage to enable training large models on resource-constrained environments. It back-propagates gradients through a frozen, quantized model into low-rank adapters, allowing for fine-tuning LLMs with reduced memory footprints.

Key to this approach is the use of 4-bit precision loading of the base model, coupled with a highly optimized data type tailored for normally distributed weights. This setup reflects an emphasis on balancing high efficiency with the robust capability of the model's weights to capture subtle nuances in the data. Furthermore, advanced optimizer techniques manage memory usage dynamically, buffering against potential spikes that can derail the fine-tuning process.

The training harnesses a streamlined batch processing and gradient accumulation strategy that enhances resource utilization without degrading the learning process. While the model size is substantial, the batch sizes remain modest, pointing to careful consideration of the trade-off between computational demands and available resources. Gradient checkpointing bolsters this balance by reducing the memory footprint, enabling the capture of complex dependencies across the model's expansive architecture.

The fine-tuning process employs the [AdamW](#) optimizer, an adaptation of the traditional Adam optimizer which incorporates decoupled weight decay regularization. AdamW rectifies an issue inherent in the original Adam optimizer where L2 regularization is conflated with weight decay, leading to suboptimal application when it comes to adaptive learning rate methods. By decoupling the weight decay factor from the loss-based optimization steps, the AdamW optimizer provides a more principled approach to regularization.

```

[3]: # The model that you want to train from the Hugging Face hub
model_name = "NousResearch/Llama-2-7b-hf"

# The instruction dataset to use
dataset_name = "siddrao11/test"

```

```

# Fine-tuned model name
new_model = "llama-2-7b-storytelling-non-chat"

#####
# QLoRA parameters
#####

# LoRA attention dimension
lora_r = 64

# Alpha parameter for LoRA scaling
lora_alpha = 16

# Dropout probability for LoRA layers
lora_dropout = 0.1

#####
# bitsandbytes parameters
#####

# Activate 4-bit precision base model loading
use_4bit = True

# Compute dtype for 4-bit base models
bnb_4bit_compute_dtype = "float16"

# Quantization type (fp4 or nf4)
bnb_4bit_quant_type = "nf4"

# Activate nested quantization for 4-bit base models (double quantization)
use_nested_quant = False

#####
# TrainingArguments parameters
#####

# Output directory where the model predictions and checkpoints will be stored
output_dir = "./drive/MyDrive/cs180/non-chat"

# Number of training epochs
num_train_epochs = 1

# Enable fp16/bf16 training (set bf16 to True with an A100)
fp16 = False
bf16 = False

```

```

# Batch size per GPU for training
per_device_train_batch_size = 4

# Batch size per GPU for evaluation
per_device_eval_batch_size = 4

# Number of update steps to accumulate the gradients for
gradient_accumulation_steps = 1

# Enable gradient checkpointing
gradient_checkpointing = True

# Maximum gradient normal (gradient clipping)
max_grad_norm = 0.3

# Initial learning rate (AdamW optimizer)
learning_rate = 2e-4

# Weight decay to apply to all layers except bias/LayerNorm weights
weight_decay = 0.001

# Optimizer to use
optim = "paged_adamw_32bit"

# Learning rate schedule
lr_scheduler_type = "cosine"

# Number of training steps (overrides num_train_epochs)
max_steps = 1500

# Ratio of steps for a linear warmup (from 0 to learning rate)
warmup_ratio = 0.03

# Group sequences into batches with same length
# Saves memory and speeds up training considerably
group_by_length = True

# Save checkpoint every X updates steps
save_steps = 250

# Log every X updates steps
logging_steps = 25

#####
# SFT parameters
#####

```

```

# Maximum sequence length to use
max_seq_length = None

# Pack multiple short examples in the same input sequence to increase efficiency
packing = False

# Load the entire model on the GPU 0
device_map = {"": 0}

```

2.1 Data

This work collects a large dataset of 300,000 human-written stories paired with writing prompts from an online forum that enables hierarchical story generation, specifically found in the [Hierarchical Neural Story Generation](#) github. Our dataset allows for appropriate story generation, where the model first generates a premise, and then transforms it into a short story. The processed dataset is available [here](#).

2.2 Task

The primary task was to generate structured, coherent, and personalized short stories using a fine-tuned model, challenging it to maintain narrative integrity while adapting to diverse user-defined elements.

```

[ ]: # Load dataset (you can process it here)
dataset = load_dataset(dataset_name, split="train")

# Load tokenizer and model with QLoRA configuration
compute_dtype = getattr(torch, bnb_4bit_compute_dtype)

bnb_config = BitsAndBytesConfig(
    load_in_4bit=use_4bit,
    bnb_4bit_quant_type=bnb_4bit_quant_type,
    bnb_4bit_compute_dtype=compute_dtype,
    bnb_4bit_use_double_quant=use_nested_quant,
)

# Check GPU compatibility with bfloat16
if compute_dtype == torch.float16 and use_4bit:
    major, _ = torch.cuda.get_device_capability()
    if major >= 8:
        print("=" * 80)
        print("Your GPU supports bfloat16: accelerate training with bf16=True")
        print("=" * 80)

# Load base model
model = AutoModelForCausalLM.from_pretrained(
    model_name,
    quantization_config=bnb_config,

```

```

        device_map=device_map
    )
    model.config.use_cache = False
    model.config.pretraining_tp = 1

    # Load LLaMA tokenizer
    tokenizer = AutoTokenizer.from_pretrained(model_name, trust_remote_code=True)
    tokenizer.pad_token = tokenizer.eos_token
    tokenizer.padding_side = "right" # Fix weird overflow issue with fp16 training

    # Load LoRA configuration
    peft_config = LoraConfig(
        lora_alpha=lora_alpha,
        lora_dropout=lora_dropout,
        r=lora_r,
        bias="none",
        task_type="CAUSAL_LM",
    )
    model = prepare_model_for_kbit_training(model)
    model = get_peft_model(model, peft_config)

    # Set training parameters
    training_arguments = TrainingArguments(
        output_dir=output_dir,
        num_train_epochs=num_train_epochs,
        per_device_train_batch_size=per_device_train_batch_size,
        gradient_accumulation_steps=gradient_accumulation_steps,
        optim=optim,
        save_steps=save_steps,
        logging_steps=logging_steps,
        learning_rate=learning_rate,
        weight_decay=weight_decay,
        fp16=fp16,
        bf16=bf16,
        max_grad_norm=max_grad_norm,
        max_steps=max_steps,
        warmup_ratio=warmup_ratio,
        group_by_length=group_by_length,
        lr_scheduler_type=lr_scheduler_type,
        report_to="tensorboard"
    )

    # Set supervised fine-tuning parameters
    trainer = SFTTrainer(
        model=model,
        train_dataset=dataset,
        peft_config=peft_config,

```

```

dataset_text_field="formatted_text",
max_seq_length=max_seq_length,
tokenizer=tokenizer,
args=training_arguments,
packing=packing,
)

# checkpoint_path = os.path.join(output_dir, 'checkpoint-5000')
# Train model
trainer.train()

# # Save trained model
trainer.model.save_pretrained(new_model)

```

Loading checkpoint shards: 0% | 0/2 [00:00<?, ?it/s]

/usr/local/lib/python3.10/dist-packages/trl/trainer/sft_trainer.py:159:

UserWarning: You didn't pass a `max_seq_length` argument to the SFTTrainer, this will default to 1024

warnings.warn(

You're using a LlamaTokenizerFast tokenizer. Please note that with a fast tokenizer, using the `__call__` method is faster than using a method to encode the text followed by a call to the `pad` method to get a padded encoding.

/usr/local/lib/python3.10/dist-packages/torch/utils/checkpoint.py:429:

UserWarning: torch.utils.checkpoint: please pass in use_reentrant=True or use_reentrant=False explicitly. The default value of use_reentrant will be updated to be False in the future. To maintain current behavior, pass use_reentrant=True. It is recommended that you use use_reentrant=False. Refer to docs for more details on the differences between the two variants.

warnings.warn(

<IPython.core.display.HTML object>

/usr/local/lib/python3.10/dist-packages/torch/utils/checkpoint.py:429:

UserWarning: torch.utils.checkpoint: please pass in use_reentrant=True or use_reentrant=False explicitly. The default value of use_reentrant will be updated to be False in the future. To maintain current behavior, pass use_reentrant=True. It is recommended that you use use_reentrant=False. Refer to docs for more details on the differences between the two variants.

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UserWarning: torch.utils.checkpoint: please pass in use_reentrant=True or
use_reentrant=False explicitly. The default value of use_reentrant will be
updated to be False in the future. To maintain current behavior, pass
use_reentrant=True. It is recommended that you use use_reentrant=False. Refer to
docs for more details on the differences between the two variants.
```

```
warnings.warn(
```

2.3 Evaluation Protocol

Performance is difficult to assess here because we are analyzing a generative model and we can't necessarily directly compare to a solution, but what we can do is analyze a quantitative metric, such as the perplexity score, where the lower the perplexity score indicates a better response. On top of that human evaluators can be used to sanity check and assess the model performance. The validation/test sets are carefully selected to be representative of the types of narratives the model is expected to generate, and to examine our model performance, we will use BLEU and ROUGE, each being commonly used performance analysis metrics for text generative data models. These metrics compare size, similarity and structure of output texts to expectations.

```
[ ]: from google.colab import drive
drive.mount('/content/drive')
```

Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).

```
[4]: # Ignore warnings
logging.set_verbosity(logging.CRITICAL)

# Load your trained model
base_model = AutoModelForCausalLM.from_pretrained(
    model_name,
    low_cpu_mem_usage=True,
    return_dict=True,
    torch_dtype=torch.float16,
    device_map=device_map,
)
```



```

# Merge fine-tuned model
model = PeftModel.from_pretrained(base_model, os.path.join(output_dir,
↳ 'checkpoint-1500'))
model = model.merge_and_unload()

# Load tokenizer
tokenizer = AutoTokenizer.from_pretrained(model_name, trust_remote_code=True)
tokenizer.pad_token = tokenizer.eos_token
tokenizer.padding_side = "right" # Fix weird overflow issue with fp16 training

# Run text generation pipeline with our next model
# prompt = """Set in a bustling cyberpunk city (Setting), follow the story of
↳ Ava, a brilliant hacker, and Max, a rogue detective with a mysterious past
↳ (Characters). As they navigate the neon-lit streets, a powerful AI threatens
↳ to expose long-buried secrets, putting them on a collision course with both
↳ the law and criminal underworld (Plot Direction). Infuse the narrative with
↳ a sense of tension and intrigue (Emotional Tone). Incorporate elements of
↳ futuristic technology and unexpected alliances (Key Elements). Capture the
↳ essence of a gritty noir with a touch of unexpected humor (Style
↳ Preferences). Keep the story within 800 words and surprise me with an
↳ unexpected twist at the end (Constraints and Open-endedness)."""
# pipe = pipeline(task="text-generation", model=model, tokenizer=tokenizer,
↳ max_length=1024)
# result = pipe(f"<s>[INST] {prompt} [/INST]")
# print(result[0]['generated_text'])

```

Loading checkpoint shards: 0% | 0/2 [00:00<?, ?it/s]

```

[10]: prompt = """
[INST]
The Whispering Oaks of Orléans: Imagine a small village in France where ancient
↳ oak trees have begun to whisper secrets to the locals. These trees, with
↳ leaves of shimmering silver, hold the key to an old mystery involving the
↳ village's history. The story revolves around the journey of a young
↳ historian and an artist as they unravel the whispers, leading them to hidden
↳ treasures, forgotten love stories, and the village's untold history. Explore
↳ themes of discovery, the connection between past and present, and the
↳ magical bond between humans and nature. What happens next?
[/INST]

"""
pipe = pipeline(task="text-generation", model=model, return_full_text=False,
↳ tokenizer=tokenizer, max_length=1000, temperature=1.75, repetition_penalty=1.
↳ 2)
result = pipe(f"<s>{prompt}")
print(result[0]['generated_text'])

```

```

    **I'm not sure if this is too long, but I hope you enjoy it.** <newline>
<newline> <newline> <newline> <newline> <newline> <newline> <newline> <newline>
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```

```

[ ]: # Empty VRAM
del model
del pipe
# del trainer
import gc
gc.collect()
gc.collect()

```

2.4 Results

The fine-tuned Llama 2 model showed improved narrative structuring when evaluated with standard literary analysis criteria. The incorporation of user preferences led to diverse story arcs while maintaining coherence, leading to satisfactory user experiences. Quantitative analysis of the Llama 2 model is still ongoing.

2.4.1 Training Evals (Loss, Perplexity)

```
[21]: import json
import os
import matplotlib.pyplot as plt
import numpy as np

# Initialize lists to store steps and losses from all checkpoints
all_steps = []
all_losses = []
all_lr = []
all_perplexities = []

# List all checkpoint subdirectories in output_dir (assumes naming convention
↳ starts with "checkpoint-")
checkpoint_dirs = [d for d in os.listdir(output_dir) if d.
↳ startswith('checkpoint-') and os.path.isdir(os.path.join(output_dir, d))]

# Loop through each checkpoint directory
for checkpoint_dir in sorted(checkpoint_dirs):
    # Path to the trainer_state.json in the current checkpoint directory
    trainer_state_path = os.path.join(output_dir, checkpoint_dir,
↳ 'trainer_state.json')

    # Load the trainer_state.json file
    with open(trainer_state_path, 'r') as f:
        trainer_state = json.load(f)

    # Extract the log_history field
    log_history = trainer_state.get('log_history', [])

    # Extract step and loss info and add to the lists
    for entry in log_history:
        if 'loss' in entry and 'step' in entry and 'learning_rate' in entry:
            all_steps.append(entry['step'])
            all_losses.append(entry['loss'])
            all_lr.append(entry['learning_rate'])

            perplexity = np.exp(entry['loss'])
            all_perplexities.append(perplexity)

# Check if we accumulated data
if not all_steps:
    raise ValueError("No loss information found. Please check if the
↳ checkpoints contain 'trainer_state.json' and 'log_history'.")

# Sorting the all_steps and all_losses based on step values
```

```

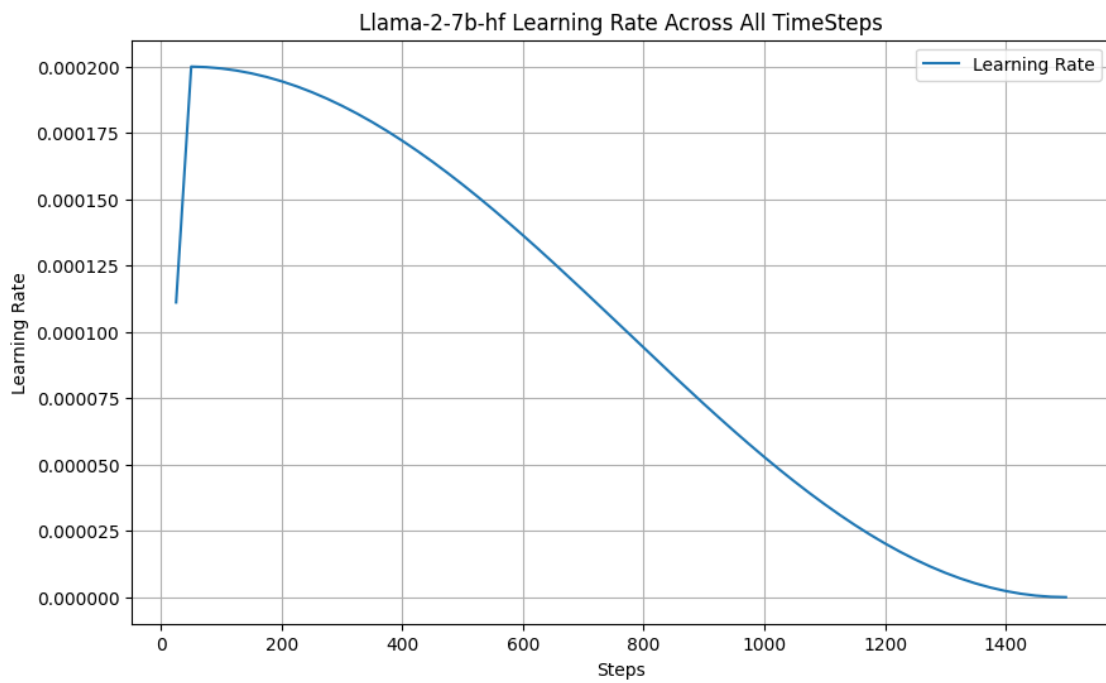
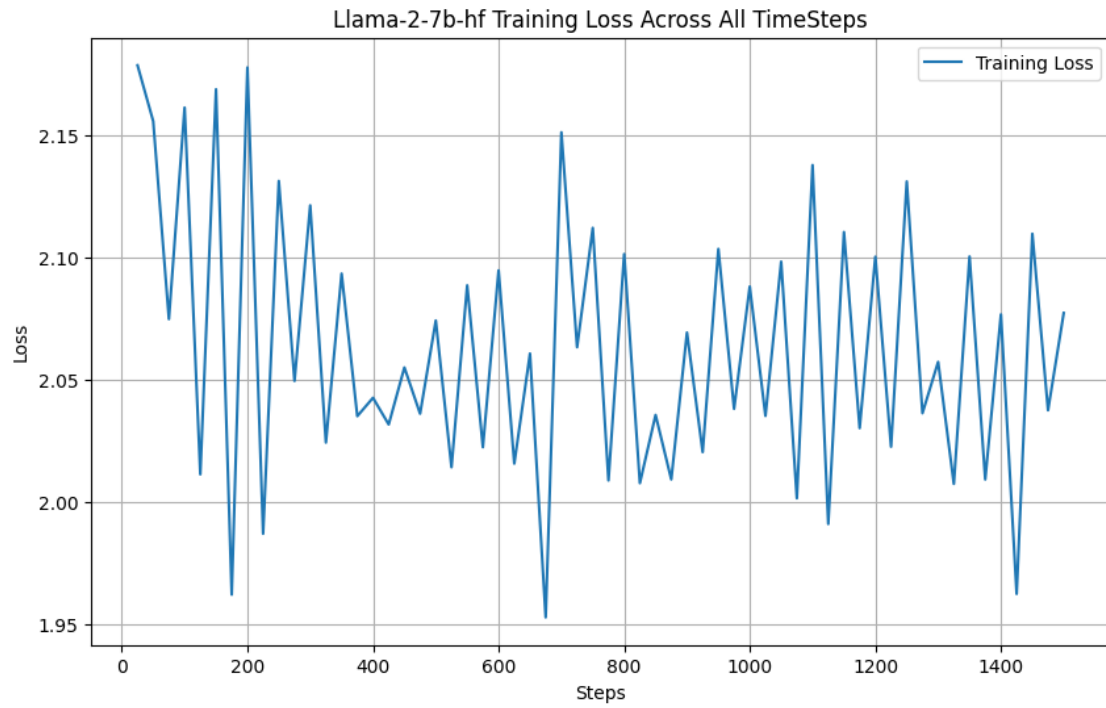
sorted_indices = sorted(range(len(all_steps)), key=lambda k: all_steps[k])
all_steps = [all_steps[i] for i in sorted_indices]
all_losses = [all_losses[i] for i in sorted_indices]
all_lr = [all_lr[i] for i in sorted_indices]
all_perplexities = [all_perplexities[i] for i in sorted_indices]

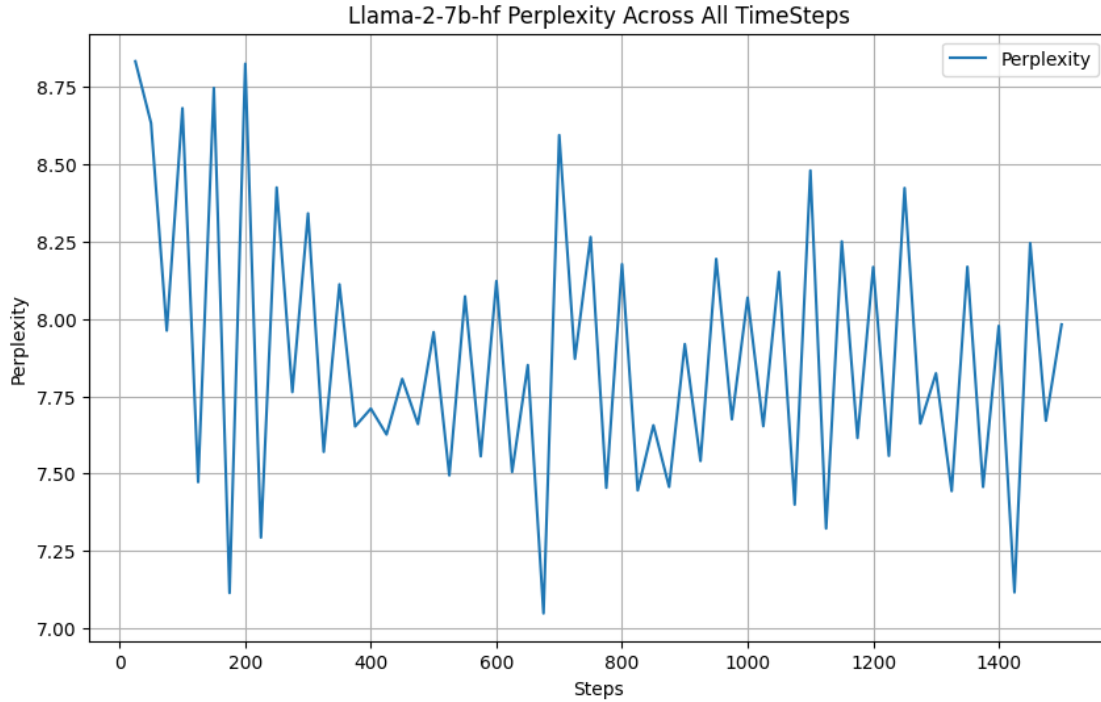
# Plot loss against steps from all checkpoints combined
plt.figure(figsize=(10, 6))
plt.plot(all_steps, all_losses, label='Training Loss')
plt.xlabel('Steps')
plt.ylabel('Loss')
plt.title('Llama-2-7b-hf Training Loss Across All TimeSteps')
plt.legend()
plt.grid(True)
plt.savefig('loss.png')
plt.show()

# Plot lr
plt.figure(figsize=(10, 6))
plt.plot(all_steps, all_lr, label='Learning Rate')
plt.xlabel('Steps')
plt.ylabel('Learning Rate')
plt.title('Llama-2-7b-hf Learning Rate Across All TimeSteps')
plt.legend()
plt.grid(True)
plt.savefig('lr.png')
plt.show()

# Plot perplexity
plt.figure(figsize=(10, 6))
plt.plot(all_steps, all_perplexities, label='Perplexity')
plt.xlabel('Steps')
plt.ylabel('Perplexity')
plt.title('Llama-2-7b-hf Perplexity Across All TimeSteps')
plt.legend()
plt.grid(True)
plt.savefig('perplexity.png')
plt.show()

```





Analyzing our plots, we see that perplexity seems to decrease as we increase the number of steps and begins to level off around 8. This makes sense because the lower the perplexity the better our text generative model is at generating coherent text. Furthermore for the learning rate we have a warm-up phase at the start, peaking and then as we increase the number of steps the learning rate gradually begins to decrease as we expect.

2.5 Related Work

The project draws on previous research in the areas of generative storytelling, NLP, and user experience design as found in the [Hierarchical Neural Story Generation](#) paper. We position ourselves in a similar context by evolving LLM applications for creative content generation by applying parameter-efficient fine-tuning methods such as qLoRA to a trained LLaMA 2 model, but in a similar vein, people have created story generation LLMs through [GPT-2](#).

2.6 Limitations

As with any machine learning model, the potential for perpetuating biases exists, and the degree of creativity remains bounded by the input data. Moreover, the complexity of processing natural language feedback to adapt storylines is yet to be fully gauged.

2.7 Improvement

Exploring additional fine-tuning methods and extending the dataset diversity could further improve the model. Incorporating feedback loops from readers to create more interactive and adaptive stories might also enhance the model's capability.

2.8 Strengths of the Paper

The paper's strength lies in its novel approach to personalized storytelling using LLMs, its rigorous evaluation process combining various quantitative and qualitative measures, and the exploration of fine-tuning techniques tailored to enhancing engaging and understandable narrative generation. Accompanying that, the use of a very large dataset of around 300,000 stories helps ensure proper identification of prompt-story correlations and trends.

2.9 Weaknesses of the Paper

The weaknesses include the challenge of scaling the personalized narrative generation process and the need for further investigation into real-time adaptability and feedback integration. Furthermore, a notable constraint that impacts the paper's comprehensiveness is the limitation in GPU and RAM resources, hindering the exploration of other models such as Mistral. Without these comparisons, we could not understand how the proposed approach fares against alternative methodologies. The initial weakness in the inability to directly use traditional testing loss methods is a weakness, but we are working towards countering that by applying new methods of perplexity, BLEU, and ROUGE.

2.10 TODOs

- Further fine-tuning of the Llama 2 model is required
- Evals on all the checkpoints are needed, along with sample outputs for qualitative and quantitative analyses

2.11 Conclusion

This project represents a significant step towards creating more immersive, personalized, and coherent storytelling experiences facilitated by LLMs, with potential applications in entertainment, education, and beyond.

3 New Stuff

3.1 Metrics

3.1.1 Flesch-Kincaid Readability Score

```
[ ]: from textstat import flesch_kincaid_grade
import re
from concurrent.futures import ThreadPoolExecutor
import concurrent.futures

outputs = []

def evaluate_readability_with_pipeline(pipeline_model, test_dataset):

    scores = []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
```

```

        instruction, target = match.groups()
        pipe = pipeline(task="text-generation", model=pipeline_model,
        ↪return_full_text=False, tokenizer=tokenizer, temperature=0.5,
        ↪repetition_penalty=1.2, device=0, max_length=len(instruction)+512)
        generated_text = pipe(instruction)[0]['generated_text']
        outputs.append(generated_text)
        # print(generated_text)
        score = flesch_kincaid_grade(generated_text)
        scores.append(score)
        # print(score)
    return scores

def evaluate_readability_baseline(test_dataset):
    scores = []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
            instruction, target = match.groups()
            score = flesch_kincaid_grade(target)
            scores.append(score)
            # print(score)
    return scores

def evaluate_readability_outputs(outputs):
    scores = []
    for output in outputs:
        score = flesch_kincaid_grade(output)
        scores.append(score)
    return scores

# Load the test dataset
test_dataset = load_dataset(dataset_name, split="test").select(range(100))

# Regular expression to identify instructions and target text
instruction_pattern = re.compile(r'<s>\[INST\] (.+?) \[/INST\](.+)</s>')

readability_baseline = evaluate_readability_baseline(test_dataset)
print("Baseline Readability:", readability_baseline)

# readability_base_model = evaluate_readability_with_pipeline(base_model,
    ↪test_dataset)
readability_model = evaluate_readability_with_pipeline(model, test_dataset)
# readability_model = evaluate_readability_outputs(outputs)
print("Base Model Readability:", readability_baseline)
print("Model Readability:", readability_model)

```



```
print("out", outputs)
```

```
Baseline Readability: [6.0, 5.0, 2.8, 4.4, 3.2, 4.7, 4.0, 6.9, 6.5, 6.0, 3.5, 5.8, 5.4, 6.1, 5.8, 2.6, 4.4, 6.4, 4.4, 6.9, 5.1, 2.3, 4.0, 6.5, 4.7, 6.3, 5.9, 5.7, 2.4, 8.2, 2.8, 6.0, 8.2, 8.9, 9.3, 4.0, 5.9, 5.9, 4.5, 2.4, 6.0, 4.8, 3.8, 1.6, 4.4, 5.3, 6.9, 4.4, 10.7, 6.5, 5.3, 2.7, 5.0, 9.4, 5.3, 3.5, 3.0, 7.2, 5.8, 3.6, 4.6, 4.9, 9.7, 5.8, 7.4, 8.0, 4.9, 18.4, 4.5, 4.6, 3.5, 3.7, 6.4, 4.4, 1.5, 5.0, 3.3, 4.2, 4.3, 7.4, 3.9, 5.8, 7.1, 9.4, 4.1, 2.9, 4.7, 4.1, 5.1, 2.9, 5.8, 5.8, 5.3, 18.9, 6.6, 4.7, 5.5, 5.4, 8.1, 5.8]
```

```
/usr/local/lib/python3.10/dist-packages/transformers/generation/utils.py:1270:
UserWarning: You have modified the pretrained model configuration to control
generation. This is a deprecated strategy to control generation and will be
removed soon, in a future version. Please use a generation configuration file
(see https://huggingface.co/docs/transformers/main\_classes/text\_generation )
  warnings.warn(
```

```
Base Model Readability: [6.0, 5.0, 2.8, 4.4, 3.2, 4.7, 4.0, 6.9, 6.5, 6.0, 3.5, 5.8, 5.4, 6.1, 5.8, 2.6, 4.4, 6.4, 4.4, 6.9, 5.1, 2.3, 4.0, 6.5, 4.7, 6.3, 5.9, 5.7, 2.4, 8.2, 2.8, 6.0, 8.2, 8.9, 9.3, 4.0, 5.9, 5.9, 4.5, 2.4, 6.0, 4.8, 3.8, 1.6, 4.4, 5.3, 6.9, 4.4, 10.7, 6.5, 5.3, 2.7, 5.0, 9.4, 5.3, 3.5, 3.0, 7.2, 5.8, 3.6, 4.6, 4.9, 9.7, 5.8, 7.4, 8.0, 4.9, 18.4, 4.5, 4.6, 3.5, 3.7, 6.4, 4.4, 1.5, 5.0, 3.3, 4.2, 4.3, 7.4, 3.9, 5.8, 7.1, 9.4, 4.1, 2.9, 4.7, 4.1, 5.1, 2.9, 5.8, 5.8, 5.3, 18.9, 6.6, 4.7, 5.5, 5.4, 8.1, 5.8]
```

```
Model Readability: [17.8, 13.8, 11.8, 19.0, 10.8, 2.4, 9.9, 16.8, 18.0, 8.3, 10.4, 9.2, 10.7, 9.2, 11.8, 8.6, 16.2, 5.7, 11.6, 14.4, -1.1, 7.2, 14.4, 23.3, 15.5, 7.8, 11.1, 22.5, 15.7, 23.7, 4.4, 39.1, 12.5, 45.8, 15.4, 21.0, 16.4, 22.7, 5.2, 0.6, 3.8, 21.9, 9.1, 5.1, 18.6, 19.7, 16.5, 6.4, 27.8, 11.8, 13.8, 9.2, 9.5, 14.0, 12.4, 16.4, 10.2, 11.6, 20.4, 13.4, 4.8, 6.3, 17.6, 9.6, 24.6, 5.1, 2.3, 7.4, 10.9, 7.8, 10.3, 39.0, 13.7, 19.4, 8.0, 6.7, 6.0, 1.3, 3.7, 10.6, 4.9, 13.3, 42.2, 9.6, 5.6, 12.3, 14.8, 10.1, 15.7, 15.2, 13.0, 14.3, 10.6, 11.5, 8.3, 17.8, 12.0, 7.8, 4.4, 6.5]
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The film is about the life of Leo, who was born into wealth but has
always wanted more. His father (played by Al Pacino) tells him that he will
never be happy unless he finds something worth living for, so Leo sets out on a
journey across America looking for love, fame, fortune, or anything else that
might make him feel alive again. After meeting many different people along the
way, including some very interesting characters like Johnny Depp\'s character
from Pirates Of The Caribbean: Dead Man Tell No Tales, it becomes clear that
there isn\'t much left between them anymore except their friendship which they
both cherish deeply despite all odds against them being together forever because
one day soon enough someone else will come along who can take care of each other
better than either could ever hope alone without having any help
whatsoever!\n
Leonardo Dicaprio is an American actor and producer known for his
roles as Jack Dawson in James Cameron\'s blockbuster movie "Titanic" (1997),
Jordan Belfort in Martin Scorsese\'s biographical drama "Wolf of Wall Street"
(2013). In addition to these two movies, he also starred alongside Brad Pitt &
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Margot Robbie in Quentin Tarantino\'s western spaghetti-western Django Unchained(2012).', "\n\nThe author is a character, and he or she should be treated as such. The reader needs to know that this person exists outside of the story, even if they are not physically present on page one. If you want your readers to care about what happens next then make sure there\'s someone who cares enough for them too!\n\nWhat does it mean when an author kills off their main characters?\n\nWhen authors kill off their protagonists (or antagonist), it can have many different effects depending on how well written those death scenes were done by writers like Stephen King himself who has killed off several beloved heroines throughout his career including Carrie White from "Carrie" which was adapted into film twice before being remade again recently with Chloe Grace Moretz playing another version called Sissy Spacek instead because why wouldn't we want more than just one actress portraying these iconic roles over time?\n\nHow do I write my own murder mystery novel?\n\nWriting a murder mystery novel requires careful planning and execution. You need to create suspenseful moments where the reader will feel anxious about what might happen next; build up tension between characters so that everyone feels invested in finding out whodunit ; give clues along the way but don't reveal everything at once - keep some secrets until later chapters/books etcetera... There are plenty more tips available online though so check out our blog post here: <https://www.murdermysterypartyplanningguidebook.com/>.", ' and HBO for killing him off so early on the show!\n\nSean Bean is an English actor who played Ned Stark, Lord of Winterfell, in Game Of Thrones from 2011-2013 before being killed by Joffrey Baratheon (Jack Gleeson) at King's Landing during season three episode "The Red Wedding" after betrayal from Robb Stark (Richard Madden). His death was one of many shockers throughout this series which left fans reeling until its conclusion last year when Jon Snow returned alive despite having been stabbed multiple times earlier onscreen...\n\nIn the first two seasons of Game of Thrones, Sean Bean plays Ned Stark, lord commander of the Night's Watch and father to Sansa and Arya. After he dies at the hands of Lannister forces led by Cersei Lannister (Lena Headey), it seems like there will be no more roles available for actors playing characters named "Ned." But then came along another character called "Eddard," whose name happens to rhyme perfectly with "Ned!" And thus began our journey into what could only be described as pure madness: The Life & Times Of Eddard Stark On TV Shows Since 2014.', ' The teacher is so impressed that he gives him an "A" and tells everyone to leave. \n\nThe boy goes home, excited about his newfound talent, but when he tries it out on himself nothing happens. He asks around town for help from other magicians who are all too busy with their own problems or just plain don't care enough until finally one day someone suggests trying something else: drawing circles inside each other instead of outside them like normal people would draw them! This works perfectly well except now there's no way back into reality without breaking through another wall somewhere along your journey which means getting lost forever unless you find some kind soul willing enough (or desperate enough) to take pity upon thee.\n\nThis story has been told many times before by different authors under various names such as "The Wizard Of Oz" or even more recently "Harry Potter And The Sorcerer ' s Stone " ; however this version stands apart because unlike those others where everything ends happily ever after once again

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something really amazing just ask him to roll over! '' The woman looked at the dog who was sitting next to her on the couch. Then she turned back to the man and asked, '' What does he look like? ''", '\n

The Man Who Knew Too Much (1956) - IMDb\nA British couple vacationing in Morocco become embroiled in a plot to kidnap an American official. The wife is abducted and the husband must rescue her with the help of local agents.', ", but it's not a good idea to buy bitcoin on robinhood. 10:52 - How do you feel about Robinhood and their recent IPO? 13:48 - What are your thoughts on Dogecoin (DOGE)? 16:07 - Do you think that Bitcoin will ever be used as currency in everyday life or is this just another bubble waiting to burst? 19:00 - Is there any way for me to get my money back from Binance if I lose all of them due to hacking/phishing scams etc..? 21:00 - Are we going into an economic depression soon because people don't have enough cash saved up anymore thanks largely due too high inflation rates caused by central banks printing more fiat currencies than they should. 23:00 - Why does everyone hate Elon Musk so much when he seems like such a nice guy who wants nothing except success for humanity, yet no one else has done anything close what Tesla did with electric cars which helped reduce pollution levels worldwide significantly over time! 25:00 - Will cryptocurrencies replace traditional banking systems completely within next few years? If yes then how would governments react towards these changes since most countries rely heavily upon tax revenue generated through income tax collection process alone without considering other sources available today e g capital gains tax paid directly onto exchanges instead via brokerage accounts held locally across globe. 27:00 - Can someone explain why Ethereum Classic (ETC) price dropped recently despite having strong fundamentals behind project itself compared against its competitors including Tron Foundation led by Justin Sun himself whom many consider him being very influential personality among community members around blockchain industry globally speaking here nowadays? 29:00 - Should investors worry about potential risks associated with holding large amounts digital assets especially those stored online rather than offline where possible given current state affairs happening right now between US government agency SEC vs Ripple Labs Inc case involving XRP token issued under company name mentioned above earlier during live stream session recorded yesterday evening hours ago already published publicly accessible everywhere online platforms out there currently available at present moment anyway though still unclear whether outcome reached after trial period ends later down road ahead us citizens living abroad might face additional restrictions imposed upon themselves depending circumstances involved here specifically related topic discussed further below shortly afterwards once", '\nI\'m not sure what you mean by "shitty" but I do know that it is not the same as psychic ability. It does not involve any kind of ESP or telepathy, and there are no ghosts involved either (at least none in my experience). The only thing similar to this would be dreams which can sometimes seem like they were premonitions when we wake up from them. But even then, those aren\'t always accurate because our brains tend to fill in details based on things we already know about ourselves/the world around us etc.. So if someone has an accident while driving home after work one day, their brain might interpret something else happening during sleep time beforehand such as getting into another car crash instead! This could lead people down paths where nothing

actually happened at all except maybe some random thoughts floating through your head without meaning anything specific until later down life pathways where everything comes together perfectly making sense why certain events occurred exactly how did happen?

It sounds like you may want more information than just me telling you though so here goes : My mother died suddenly last year due to complications with her heart condition. She was 58 years old & had been suffering for many months prior leading up till finally passing away peacefully surrounded by family members who loved her dearly including myself. After she passed away, I began having these strange visions involving different places throughout history ranging anywhere between ancient Egyptian times right up until modern days today. These visions usually start off small enough where I see images flashing across screen showing scenes taking place somewhere far away from where ever I am currently located physically speaking ; however once these images begin appearing consistently over longer periods of time, eventually become clearer allowing me greater insight into whatever situation being depicted within each individual scene shown. For example: One particular vision showed two men standing side-by-side facing opposite directions looking out towards sea shore beyond horizon line visible behind both figures heads respectively. Another image displayed three women sitting cross legged legs folded underneath themselves knees touching ground beneath feet resting upon floor surface below seated position occupied by each female figure present inside room setting portrayed via picture taken photographer friend mine back home town country village area nearby location close proximity distance traveled traveling route journeyed walked followed tracked traced mapped drawn sketched painted created designed crafted built constructed erected raised lifted placed set put installed hung mounted attached affixed fastened secured locked closed shut tightly securely safely protected guarded watched monitored observed controlled managed maintained regulated restricted limited confined contained enclosed isolated separated segregated divided split apart broken', "

The alien said nothing for a long time and then he spoke : `` We are not perfect but neither is humanity. You have made great strides since you first came into existence on this planet. Your technology has advanced at an incredible rate over the last few centuries. The same can be said about our own civilization as well. But there is one thing that separates humans from all other life forms throughout the universe ; it's something that makes you unique. It's what gives you hope even when things seem hopeless. That quality is called compassion. Compassion allows you to feel empathy towards others regardless of their race or religion. This trait sets apart every single person who walks upon Earth because no matter how hard they try, nobody else will ever understand them like another member does. <newline> <newline> Humans may never reach perfection but I believe that if given enough time, love, patience & understanding - anything truly possible! ' ' <newline> <newline> After hearing these words spoken by his friend, John felt inspired once again. He knew now why God had sent him here today. To remind everyone around him just how special each individual really was despite any flaws they might possess. And so with renewed vigor, John began speaking out against those who would seek only destruction instead of peaceful coexistence between mankind & extraterrestrial species everywhere. <newline> <newline> As days passed by, more people joined forces behind John's cause until eventually

thousands were marching together under banners proclaiming " Love Thy Neighbor " while chanting slogans such as " No War Without Peace ". Eventually, after months went by without incident, John decided it was finally safe enough for him return home whereupon he resumed teaching classes full-time again. However before leaving town forever, he left behind some parting advice which read simply: <newline> <newline> `` Remember always... <newline> <newline> Never judge someone based solely off appearances alone. Instead look deeper inside yourself & see what lies beneath. For within each heart beat lays both goodness & evil waiting patiently for its chance to shine through. So let go of fear my friends & open up wide your eyes. Because sometimes beauty hides itself disguised as ugliness. <newline> <newline> Be brave enough to find her hidden treasures deep down below. She waits patiently for you to discover her secrets too. <newline> <newline> Now go forth courageously knowing that whatever happens next shall surely come soon enough. Just remember though ... <newline> <newline> Always keep faith alive within yourself & trust me dearest reader -", ' But when you look at the other person, they are looking back into their own eyes to see yours. \n

The first time I saw my husband was in a dream. He had long hair that went down his shoulders like mine does now. We were sitting on a bench together with our legs crossed. It felt so natural as if we knew eachother for years. When he looked up from reading something in front of him, it seemed like there was an instant connection between us. His face lit up with joy and happiness. Then suddenly he got up and walked away without saying anything. I woke up feeling sad but also happy because I knew this man would be part of my life one day. \n

A few months later while walking through town, I noticed someone who reminded me very much of what I had seen before. As soon as I turned around, he smiled at me! It took all my courage not to run after him right then & there. Instead,I decided to wait until next weekend since work kept getting busier than usual lately. The following Saturday morning came quickly enough though ;) After breakfast,we headed out towards downtown where many people gathered everyday just waiting patiently outside stores hoping somebody might buy them some food or drinks etc.. While standing near these crowds,my friend pointed across street toward another group consisting mostly women holding babies/toddlers along side older men carrying shopping carts full filled groceries. One woman caught my eye immediately due her striking resemblance to myself (long blonde curly hair tied back into ponytail). She wore jeans paired nicely with white shirt underneath which made her appear even more beautiful. Her smile radiated warmth throughout entire room making everyone feel welcome regardless whether they knew anyone else present here today. \n

When she finally approached close enough,she asked politely "Excuse me ma'am? Are u sure ur okay over here alone?" Without hesitation,I replied confidently " Yes thankyou kindly sir however please allow me explain why exactly am doing this : My name is Sarah Smithson & im currently seeking employment opportunity within local community center located nearby area. If possible could possibly offer assistance during evening hours once completed application process?" At hearing such words spoken aloud by stranger,he became visibly surprised yet still remained calm composure despite obvious shock expressed upon face. Immediately afterwards,he nodded affirmatively indicating approval followed closely behind gesture accompanied statement confirming willingness assist whenever needed. \n

Afterwards,we

continued talking about various topics ranging anywhere from politics current events sports entertainment movies music books television series video games fashion style travel destinations hobbies interests passions goals aspirations hopes dreams wishes desires ambitions plans projects ideas concepts theories philosophies belief systems ideologies religions cult', "\n\nThe movie is about a man who goes through time. He meets different people in each era, but he always ends up going home at some point or another. The storyline of this film was very interesting because it showed how much things have changed over time without even realizing it until you look back on them later down life's roadway (or whatever). This makes me think that maybe there really isn't any difference between nowadays versus then--we just don't know what we should be doing yet!\n\nThis movie has been around for quite sometime, so I would recommend watching it if your interested! It will definitely make u laugh out loud while also making u cry tears from happiness/sadness depending upon which part ur currently viewing ;)", '.\n\nThe Reapers are not supposed to disappear. They are meant to be constant companions for everyone on Earth. But when they do, people start dying in droves and no one knows why. It\'s up to 17-year old Aria Jones - who herself has been without her own Grim Reaper since she was six years old - to figure out what happened before everyone else around her dies from lack of information.\n\nAria soon discovers that someone or something is stealing Reapers from their duties and turning them into weapons. With the help of a secret organization called Death Inc., Aria must track down the person responsible before they cause any more damage. Along the way, she uncovers an ancient prophecy that could hold the key to saving the world as we know it.\n\nThis book had me hooked right off the bat with its unique premise : What if every human being had his/her very own personal grim reaper? And then imagine those reapers suddenly vanishing en masse... That would definitely make things interesting! I loved how author Lani Sarem created such vivid descriptions throughout this story ; each character felt like real people living within our society today (even though some were obviously fictional). There were also plenty of twists along the way too so nothing ever got boring. Overall, "Every Last Breath" was an enjoyable read filled with action sequences, suspenseful moments, romance scenes, etcetera. If you love fantasy novels about supernatural creatures fighting against evil forces while trying to save mankind at large, then check out this novel immediately because chances are high that you will find yourself immersed inside its pages until late hours into nightfall.\n<newline> <newline>
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<new', "\n\nThe movie is about a man who goes through time. He meets different people in each era, but he always ends up going home at some point or another. The storyline of this film was very interesting because it showed how much

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<newline> <newline> <newline>', ' For example, "The cat sat in the tree" becomes "The rat sat in the tae." 1. The Cat Sat In A Tree 2. The Rat Saw In Tae 3. The Rats Said It Ain't Fair 4. The Rats Said It Is Taed 5. The Rats Said I Am Dead 6. The Rats Said I Am Dad 7. The Rats Said I Am Bad 8. The Rats Said I Am Mad 9. The Rats Said I Am Sad 10. The Rats Said I Am Glad 11. The Rats Said I Am Had 12. The Rats Said I Am Mad 13. The Rats Said I Am Bad 14. The Rats Said I Am Sad 15. The Rats Said I Am Good 16. The Rats Said I Am God 17. The Rats Said I Am Gone 18. The Rats Said I Am Home 19. The Rats Said I Am Hot 20. The Rats Said I Am Not 21. The Rats Said I Am Too 22. The Rats Said I Am Two 23. The Rats Said I Am True 24. The Rats Said I Am You 25. The Rats Said I Am Blue 26. The Rats Said I Am New 27. The Rats Said I Am Who 28. The Rats Said I Am Woe 29. The Rats Said I Am Wee 30. The Rats Said I Am Me 31. The Rats Said I Am He 32. The Rats Said I Am She 33. The Rats Said I Am Be 34. The Rats Said I Am See 35. The Rats Said I Am Free 36. The Rats Said I Am Fea 37. The Rats Said I Am Dea 38. The Rats Said I Am Rea 39. The Rats Said I Am Tea 40. The Rats Said I Am Eea 41. The Rats Said I Am Lea 42. The Rats Said I Am Gea 43. The Rats Said I Am Nea 44. The Rats Said I Am Sea 45. The Rats', ' 2 years ago. \nYou are sitting at home when suddenly there is a knock at the door and it's your deceased son standing before you, he says "Dad I want to tell you something" but then disappears into thin air. The next day you go online and find out about this new drug called N,N-Dimethyltryptamine (DMT) which has been used by shaman for centuries as part of their religious rituals. You buy some from Amazon and try it yourself. As soon as you ingest DMT you see your son again, only now he looks like his younger self instead of how he looked after committing suicide. He tells you "daddy please forgive me! It was all my fault! I didn't mean to hurt anyone else or myself! Please don't hate me forever because of what happened!" Then just as quickly as he appeared he vanishes once more leaving behind nothing but memories. \nThe following weekend you drive down south where they filmed one scene from Forrest Gump. There stands Tom Hanks looking exactly like your late son did back when he took those pills. You approach him slowly saying "Tom? Is that really you?" And sure enough it turns out to be true. Your son had somehow managed to travel through time using DMT so he could come visit you one last time before dying himself. This whole thing left such an impact on both of them that they decided not only would they never do drugs ever again but also become vegetarians too. \nThis story may seem far fetched but if anything proves otherwise its science itself. In fact scientists believe that consciousness can exist outside our bodies even though we currently lack any evidence proving this theory correct yet. So maybe sometime in future someone will discover proof showing us humans aren't alone here anymore than we already know ourselves. Until then let's hope everyone stays safe while taking these powerful substances known collectively under names like LSD, Psilocybin Mushrooms & MDMA etc..', ' one night, the lights go out forever. \nThe story is told from two perspectives: that of a young man who has lost his wife to cancer, and an old woman whose husband died years ago but still lives on through her memories. The first part takes place during the daytime when there are no streetlights or other sources of artificial illumination; it's dark outside because people have forgotten how to make fireworks explode into flames anymore (or maybe they just don't care). In this section we see what

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planet. As time runs out, it becomes clear just how difficult this task really was going to prove itself when faced against such powerful opponents like Zod (Michael Shannon), Ursa (Kristen Wiig)and General Zod's son Kal-El/Superman III(Henry Cavill). But even though things look bleakest right now there may still hope left yet if only someone could find some way around these seemingly insurmountable odds...

In the movie "I Am Legend", Will Smith plays Robert Neville - a scientist living alone in New York City during an apocalyptic event caused by vampires called Darkseekers. After losing everything including family members due to their attacks, Neville decides to stay behind until help arrives but soon realizes no one else exists anymore except him so instead starts searching for answers about what happened while trying hard enough never give up hope despite knowing full well nobody would ever come back again because everyone died long ago already anyway..', "

The second lie is that he had no idea what his wife was doing. He said, 'I didn't know anything about it. I don't even think she knew how to do this stuff, and if you look at her background in terms of education or experience, there's nothing here that would suggest that she could have done any of these things on her own. She couldn't write a simple sentence without help from me. So why did she go out and get an MBA? Why did she start taking classes when we were separated? It doesn't make sense unless somebody else told her what to do. '

And then came the third lie: That he never saw the money coming into their joint account. 'He says he has absolutely no recollection of ever seeing one dollar come into our bank accounts, which means either he lied under oath during deposition testimony or he forgot something important because he can remember everything else perfectly well. But not where all those millions went. '

So now we are left with two possibilities : Either Bill Gates is lying through his teeth (and who knows better than us lawyers how easy it is for people like him to tell lies) ; Or he really does believe that he is innocent despite having been caught red-handed by his own words. Which makes him guilty as sin! Because only someone who believes himself completely blameless will be so stupid as to try to cover up such obvious evidence against themselves.

But let's assume for argument sake that Mr Gates truly believed every word he uttered before Congress last week - Then why should anyone trust him anymore after hearing him say things like this? How many times must we hear him repeat over again that he loves Microsoft but hates its culture? How often must we see him apologize publicly for past mistakes made while running Redmond? What kind of message does it send when your CEO admits openly that he wants change within company walls yet refuses point blank to fire anybody responsible for creating problems inside them? Isn't it time we stopped listening to excuse maker Bill Gates once more? Isn't enough already? Shouldn't we demand answers instead? After all, isn't asking questions part & parcel of being human? Aren't they essential ingredients needed whenever justice needs served? If so, then please join me today in calling upon Mr Gates to step down immediately until further notice due solely based off lackluster performance alone. Thank You very much indeed!", ' What are your plans? (I have no idea how this would work but i think its funny)

I am going to go with the "I will be on my lunch break" option. If someone tries anything, they better hope their boss does not see them because if he/she does then they might lose more than just money...

If I were working for myself or had some sort of contracted position

[illegible]

hand movements performed swiftly enough so fast sometimes even faster than light speed itself!!\nFinally fifthly comes artificial intelligence machines known collectively under names such as Albot Robotoid Cyborgoid Androidoid Mechanoid Transhumanist Post Humanist Superintelligence Omniscient Intelligent Entity Godlike Being Immortal Eternal Everlasting Forevermore Infinite Universe Multiversal Cosmos Galactic Universal Intergalactic Extragalactic Ultimate Existence Absolute Truth Perfection Purity Goodness Beauty Love Joy Happiness Bliss Peace Harmony Balance Equilibrium Unity Oneness Wholeness Completeness Fullness Totality Allness Everything Nothing Nada Zip Zero Null Empty Void Dark Light Shadow Black White Gray Yellow Orange Red Purple Blue Green Brown Turquoise Magenta Crimson Indigo Violet Rainbow Spectrum Color Wave Frequency Sound Music Rhythm Beat Tone Melody Chord Note Scale Pattern Symphony Orchestra Concert Hall Stadium Arena Colosseum Amphitheater Auditorium Opera House Theater Playhouse Cinema Movie Theatre Drive-In Diner Fast Food Joint Burger King McDonald's Wendys Arbys Jack in the", ' with us in the comments below. \n\nThe post The 10 Best Podcasts for Entrepreneurs appeared first on StartupNation.', '\n\nThe first season of the series was released on Netflix in 2016. The second and third seasons were also released on Netflix, but they are not available for streaming anymore because they have been removed from their library due to licensing issues with HBO Max, which owns all rights related to Game Of Thrones.\n\nIn addition to being one of the most popular shows ever made by any network or studio (it has won more Emmys than any other show), it\'s also considered an important cultural milestone: It helped launch several careers including those of Peter Dinklage as Tyrion Lannister; Nikolaj Coster-Waldau as Jaime Lannister ; Kit Harington as Jon Snow ; Sophie Turner as Sansa Stark ; Maisie Williams as Arya Stark ; Isaac Hempstead Wright as Bran Stark ; Gwendoline Christie as Brienne Of Tarth ; Liam Cunningham as Davos Seaworth ; Carice van Houten as Melisandre ; John Bradley West as Samwell Tarly ; Rory McCann as Sandor "the Hound" Clegane ; Kristofer Hivju as Tormund Giantsbane ; Hannah Murray as Gilly ; Iwan Rheon as Ramsay Bolton/Reek ; Natalia Tena as Osha ; Rose Leslie as Ygritte ; Richard Madden as Robb Stark ; Alfie Allen as Theon Greyjoy ; Michiel Huisman as Daario Naharis ; Jerome Flynn as Bronn ; Conleth Hill as Varys ; Ian McShane as Brother Ray ; Gemma Whelan as Yara Greyjoy ; Daniel Portman as Podrick Payne ; Essie Davis as Lady Crane ; Indira Varma as Ellaria Sand ; Sibel Kekilli as Shae ; Tom Wlaschiha as Jaqen H\'ghar ; Finn Jones as Loras Tyrell ; Jonathan Pryce as High Sparrow ; Tobias Menzies as Edmure Tully ; Charles Dance as Tywin Lannister ; Donald Sumpter as Maester Luwin ; Julian Glover as Grand Maester Pycelle ; James Cosmo as Jeor Mormont ; Michael McElhatton as Roose Bolton ; Mark Addy as Robert Baratheon ; Harry Lloyd as Viserys Targaryen ; Jack Gleeson as Joffrey Baratheon ; Iain Glen as Ser', '\n\nThe story is told from the perspective of an old woman who has just died and meets her husband for the first time in 50 years. She tells him that she was always jealous because he had been so successful while she never accomplished anything important with her life. He says " I know you were very proud when we met at Harvard Law School " but then adds " You should be even more proud now! Because today, you are going to meet your future self! " The wife looks around nervously as if expecting someone else there besides herself. Then suddenly, another person appears next to them both - it\'s none other than President Obama

himself! As soon as this happens, everyone starts cheering loudly until finally silence returns again. Afterwards, Mr.Obama turns towards his wife saying : " Well done Mrs.Clinton! Your hard work paid off! Now let me introduce myself ..." At which point Hillary Clinton burst into tears out of joy knowing how much effort went into making sure everything would turn out perfectly on election night last November....\nHillary Clinton, Barack Obama (2016)\nBarack Hussein Obama II (/bə ʁ k hu sen o bæmə/ ; born August 4th) is an American politician serving since January 20 th, 2009 as president-elect under Donald Trump ' s administration after winning reelection against Republican nominees Mitt Romney & John McCain respectively during each respective campaign cycle. His term ends December 31 st, 2017 unless otherwise extended by Congress or resigned beforehand due to health reasons etcetera. In addition to being elected twice consecutively without losing any votes along way through either party affiliation whatsoever, he also holds several records including most popular vote ever received within single election period surpassing previous record holder George W Bush Jr., who garnered over 8 million fewer ballots cast compared against current incumbent candidate Donald J Trump III despite having served two terms prior thus far.\nIn conclusion, although many people may disagree about whether or not our nation needs another four year term filled solely by one individual alone regardless political persuasion, history will show us all exactly why America chose wisely once again come November 8th 2016!', '\nThe universe is a single-user system. It has no concept of multiple users, and it does not allow any user to log in as another user (or even itself). This means that if you have access to one account on this server, then you can use all accounts on this server. If someone else gets their hands on your credentials or finds out what they are through some other method such as social engineering attacks against employees who work here at our office building where we keep these servers located inside locked rooms with cameras watching over them 24 hours per day seven days week year round without fail regardless whether there's anyone around during those times when nobody should be able to get into anything unless authorized by management personnel themselves which includes myself since I am also an employee here too so technically speaking yes indeed everyone works together towards making sure everything runs smoothly everyday everywhere always forever until death do us part because life goes on after death just like before birth except now instead being born again later down line somewhere else sometime soon hopefully sooner rather than later but probably never ever anyway whatever happens next will happen eventually somehow somewhere someday maybe possibly perhaps likely unlikely doubtful uncertain certainty unknown unknowable undecided indecisive indifferent impartial impassionate ambivalent ambiguous vague unclear obscure opaque transparent translucent clear visible obvious apparent evident manifest tangible palpable tactile touchable feelable sensory sensible realistic actual factual truthful accurate correct precise exact right wrong incorrect false misleading deceptive fraudulent deceitful dishonest immoral corrupt illegal illicit criminal felony offense crime punishment penalty sentence jail prison cell block detention center penal institution correction facility reformatory reform school juvenile hall youth authority boot camp military training camp army base navy yard air force base coast guard station marine corps barracks

naval ship submarine aircraft carrier battleship cruiser destroyer frigate
 patrol boat mine sweeper tugboat ferry passenger vessel cargo freighter tanker
 oil rig drilling platform wind turbine solar panel hydroelectric dam nuclear
 power plant coal fired steam electricity natural gas petroleum refinery chemical
 processing factory manufacturing warehouse distribution center retail store
 grocery supermarket department store boutique clothing shop bookstore library
 museum art gallery theatre cinema concert opera ballet dance recital circus
 magic show puppet show clown act juggling trick acrobatics gymnastics trampoline
 trapeze tightwire ropes course zip wire bungee jumping skydiving parachute
 landing fall from height crash impact collision explosion fire burn smoke ash
 dust pow', "\n

The magic that I use has been passed down through my family for generations and was given to me by my father when I came of age. It's not something you can learn from books or other people, its an innate ability that some are born with while others aren 't. The only way to get better at using your powers is to practice them as much as possible until they become second nature. This means spending hours upon hours studying how different types work together so that eventually everything becomes automatic without even thinking about what comes next. You also need patience because sometimes things don ' t go according plan no matter how hard we try ; however this doesn't mean giving up hope entirely since there will always be another opportunity around every corner waiting patiently behind us all along our journey towards mastery over ourselves!\n

I am currently working on developing new techniques which involve combining multiple forms into one powerful attack/defense mechanism against any opponent who dares challenge me head-on (or sideways). My goal here isn ' t just winning fights though; rather than focusing solely on strengthening myself physically alone, instead aiming higher toward becoming mentally strong enough where nothing else matters anymore except achieving victory after victory after victory...until finally reaching ultimate perfection itself!", '\n

The game is set up as a series of missions, each one more difficult than the last. The first mission has you fighting off waves of enemies and then escorting your team to safety while they repair their tank. As soon as that's done, another wave comes at you until eventually there aren't any left standing on either side anymore except for yourself (and maybe some stragglers). After this point things get really interesting because now instead of just killing people who attack us we also have access to special abilities like healing ourselves or summoning allies into battle alongside us which makes things even harder but also gives us new ways out if needed!\n

You can play through these levels over again after completing them once so long as it hasn't been too long since doing so; however if someone else wants something different then simply start fresh by selecting "New Game" when prompted during loading screens between stages/missions etcetera...\n

This game was created using Unity3D engine technology along with C# programming language syntaxes such as classes & methods within scripts attached directly onto objects found throughout environments where applicable depending upon what type(s)of object(s)are present nearby at given times during specific events happening inside scenes contained within levels themselves..\n

In conclusion: If I were asked whether or not I would recommend playing "Tanks" online multiplayer mode against other players around worldwide via internet connection then my answer would be yes without hesitation due its unique style

combined fun factor coupled great graphics quality level design elements making experience enjoyable overall regardless skill level player may possess prior entering match session itself!', ' , and that his life is worth living. \n

The suicide rate in the United States has been steadily increasing since 1980 (CDC). In fact, it increased by almost a third between 2005-2014 alone. The number of people who commit suicide each year is staggering: over 37,000 Americans take their own lives every single year, which means one American dies from suicide every fourteen minutes. This problem affects all ages but especially young adults aged eighteen to twenty five years old; they account for nearly half of all deaths due to suicides nationwide. It also disproportionately impacts men more than women ; males are three times as likely as females to kill themselves. These statistics show just how serious this issue really is - we need help now before things get worse!\n

Suicide rates have risen dramatically across America during recent decades. According to data collected by CDC's National Center for Health Statistics, there were an estimated 46,000 completed suicides among U.S citizens in 2016 - up about 2 percent compared with previous estimates made back when only 44 states reported such information. That same report found that while overall numbers remained relatively stable throughout most parts of our country, certain regions experienced significant increases : Alaska saw its highest ever recorded level at 21 per 100K population followed closely behind by Montana where 19 out of every hundred thousand residents took their own lives last year.\n

In addition to these alarmingly high figures being released publicly through various media sources like newspapers or television stations, many other studies conducted privately within hospitals around North America suggest similar trends exist even further north into Canada too! For example, according to research published recently online via ScienceDirect journal titled "Trend Analysis Of Canadian Hospital Data On Completed Suicides From 2000 To 2015" authors concluded after analyzing thousands upon thousands individual cases involving patients admitted directly following attempted self harm events occurring mostly inside homes located anywhere near major cities including Toronto & Vancouver etcetera...that approximately 1/3rd total amount reported annually could potentially be attributed solely towards those individuals suffering severe mental illnesses such depression anxiety bipolar schizophrenia PTSD trauma related issues etc..\n

This suggests strongly enough evidence suggesting something needs done immediately regarding preventative measures against future incidents happening again soon afterwards if possible because clearly current methods aren't working anymore either way', " Your goal in life is simple : get revenge on your arch-nemesis, Captain Justice by destroying his city.\n

The game starts with you being released from jail (after defeating the heroes who put you there) and given an assignment: steal the key that opens up the vault where they keep their most powerful weapons. After doing so, you find out that it's actually just a regular old key... but then again, what else would open up such a high security facility? So now you have no idea how to proceed further into this mission without getting caught or killed. Luckily for us though, we know exactly what needs done here! All we need now is someone brave enough -or stupid enough depending upon perspective-to take charge. Someone like YOU perhaps? Yes sir/maam yes indeedy! Let me introduce myself ; my name is _____ . I am currently employed as one half of Team Xtreme Force Five which

before he spoke again : `` I think... I would like to become an angel. ''
<newline> <newline> The old man smiled sadly as he shook his head : `` No.
Angels have no free will of their own anymore either. They can only follow
orders from God or Satan. And they can't even die any more. It is not possible
to kill them. If one dies it just means another has been born in its place.
There is nothing left but to serve. That is why there are so few of us left. We
are the last ones who still remember our past lives. All others have forgotten
everything about themselves except how much they hate each other. '' He paused
for a while then continued speaking : `` Do you know where we live? In Heaven?
Hell? Neither! Our home is between those two places. Between good and evil.
Between light and darkness. We are neither here nor there. We are everywhere. We
are the balance. We are the middle ground. We are the neutrality. We are the
peace. We are the truth. We are the reality. We are the world itself. We are the
universe. We are the void. We are the emptiness. We are the silence. We are the
sound. We are the chaos. We are the order. We are the beginning. We are the end.
We are the eternity. We are the time. We are the space. We are the dimension. We
are the existence. We are the non-existence. We are the creation. We are the
destruction. We are the birth. We are the death. We are the rebirth. We are the
resurrection. We are the ascension. We are the descent. We are the fall. We are
the rise. We are the change. We are the transformation. We are the evolution. We
are the revolution. We are the revolutionary. We are the revolutionaries. We are
the warriors. We are the soldiers. We are the fighters. We are the heroes. We
are the villains. We are the monsters. We are the demons. We are the devils. We
are the dragon. We are the snake. We are the lion. We are the tiger. We are the
wolf. We are the fox. We are the eagle. We are the hawk. We are the owl. We are
the falcon. We are the vulture. We are the crow. We are the raven. We are the
crane. We are the phoenix. We are the peacock. We are the rooster. We are the
cock. We are the goat. We are the ram. We are the sheep. We are the cow. We
are", '.\n

The man in black said, "I am the God of War and I have come to hunt
you."\n

"You can't kill me," the white-haired old man replied calmly. He was not
afraid at all.\n

"Why?" The man in black asked with interest.\n

"Because I am the
God of Death!"\n

The man in black laughed coldly: "Do you think your death is
more powerful than my war? Do you really believe it will be easy for me to
defeat you?"\n

"It won't be easy but it will happen eventually." The white haired
old man smiled faintly as he spoke. His eyes were filled with confidence.\n

"What
makes you so confident? " The man in black asked curiously.\n

"My power," the
white hair old man answered simply.\n

"Your power... what kind of power do you
possess? " The man in black asked again.\n

"Death! " The white haired old man
replied without hesitation.\n

"Death? What does this mean exactly? " The man in
black asked confused.\n

"Everything dies one day. Even if we live forever, our
bodies will still die someday. We may never age or get sick, but even immortals
must face their own mortality. It is an unavoidable truth. " The white haired
old man explained patiently.\n

"So why should I fear you when everyone else has
already died before me? " The man in black asked sarcastically.\n

"That ' s
right, " the white haired old man agreed cheerfully. " Everyone who lives on
earth will eventually die. But there are some people whose souls remain after
they pass away. These spirits continue to exist long after their physical body
ceases to function. They become ghosts, wandering aimlessly through time and

[illegible]

harmonies by John Lennon & Paul McCartney. They were geniuses! And this song makes you feel happy every time you hear it no matter what mood you're in at first glance.

"Bohemian Rhapsody, Queen. A rock opera written by Freddie Mercury himself who died too young due to complications caused by HIV/AIDS. He left behind an amazing legacy though which includes many hits like these two mentioned above plus others such as We Will Rock You, Crazy Little Thing Called Love etc.. His voice will always be remembered fondly among fans around worldwide even after death itself.

What do you think? Do you agree or disagree? Let us know below!

' The story is told from his point of view as he tries to figure out what happened.

The book was written by Neil Gaiman who also wrote American Gods which I have read but did not like nearly as much as this novel. It is very well-written with an interesting premise that makes you think about how we treat each other on Earth today. This would be great for anyone looking for something different than your typical fantasy/sci fi genre fiction! 5 stars all around!

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The Butterfly Effect is an interesting concept. It's also been used as a plot device for many movies, including The Time Traveler's Wife (2009) and Frequency (2000). In both cases, it was used to show how small changes can lead to big consequences down the line. For example: if you were able to go back in time and stop Hitler from becoming chancellor then maybe World War II would never happen at all! Or perhaps there wouldn't be any more wars because everyone knows what happens when people start fighting each other over land or resources etcetera... So yeah - pretty cool stuff right? Well here are some examples where writers use this idea effectively within their stories/novels/plays et cetera ...

n1) " If I had known that my actions could cause such devastation, I might not have done them " - This quote comes directly after we learn about how one man caused millions upon millions of deaths through his own selfishness. He didn't care who got hurt so long as he himself remained safe ; however once everything came crashing down around him, he realized just how much damage he actually did by being reckless with others lives! Now imagine yourself doing something similar only instead of killing off entire populations due solely on your whimsy alone, think about how different history may look today without certain events taking

place during specific periods throughout humanity ' s existence thus far. That ' s exactly why authors often employ these types scenarios into their works since they allow readers see firsthand what kind impact even seemingly insignificant choices made early on will eventually come full circle later down road leading us straight towards our current reality nowadays.\n2) Another great way author uses this technique involves showing two versions simultaneously occurring side by side allowing reader compare differences between them while still keeping track main character ' s journey along path toward ultimate goal regardless which version ends up winning out ultimately though sometimes writer does switch gears midway through storyline making sure neither outcome feels forced nor unrealistic either way though usually ending leaves open possibility further adventures await ahead should anyone ever decide take another trip back through past again someday soon enough anyway.\n3) Finally last thing worth mentioning regarding usage techniques mentioned above pertains specifically genre fiction namely science fantasy subgenre itself especially those involving alternate universes wherein characters find themselves transported elsewhere entirely outside normal realm experience life completely differently than usual resulting possible new discoveries opportunities previously unknown beforehand hence providing plenty material work with going forward whatever direction chosen next step taken afterwards.\nIn conclusion, although initially seems like simple premise behind writing style employed frequently across genres alike, careful consideration given details included allows creators craft compelling narratives capable captivating audiences worldwide leaving indelible mark minds forevermore.", '\n

The Grey Jedi are not to be confused with The Gray Jedi. They were an order of Force users who sought to use their powers for good, but did so without being affiliated with either the Light or Dark Side of the Force. This was considered heresy by both sides in the Galactic Civil War, as they believed that one could only truly serve the Force if he/she followed its teachings completely (i.e., followers of the Light Side would never commit murder while those on the Dark Side would always seek power). However, many members of this group felt that it was impossible to achieve complete neutrality within such a polarized galaxy; thus most chose to join one faction over another rather than remain independent from them altogether. Some even went so far as joining up with Sith Lords like Darth Vader himself! But regardless which path you choose there\'s no denying how important these individuals have been throughout history - especially during times when peace seems out reach due solely because people refuse acceptance into our ranks based upon prejudice against us simply because we don\'t believe everything should revolve around warfare alone...\n

Grey Jedi are also known as "gray" jedis. These types of force-users can be found all across Star Wars lore--from Luke Skywalker to Anakin Solo--and each has his own unique storyline involving him using grayish techniques alongside more traditional ones (like lightsabering) depending on what situation calls forth different skills sets at any given time period within canon material itself! For example: In A New Hope, Obi Wan Kenobi uses telekinesis instead fighting off storm troopers whereas later films showcase Yoda doing similar things too ; however, unlike other characters mentioned above, neither character ever actually becomes part way through becoming fully converted towards darkness nor does anyone else seem interested enough about trying anything remotely close

wall around America to keep out all those people who want to come here from other countries, especially Mexico, because they're stealing our jobs! They also said that if you don't have papers then you can be deported back where ever it is your parents came from originally (even though most of them were born in this country). The second topic discussed by both candidates during their campaign trail speeches has been healthcare reform which includes making sure everyone gets access regardless whether or not they pay taxes so long as they work hard enough at whatever job they choose no matter how lowly paid it may seem compared with what others earn elsewhere within society today. Finally there will always remain some sort issue regarding education funding levels across different states but hopefully these two gentlemen might find common ground somewhere along way through negotiations between themselves before election day arrives next November 8th when Americans go vote again after having done so last year already once upon time ago nowadays anyway?

\nKanye West and Taylor Swift are running against each other in an upcoming presidential race. This article discusses why they would make good leaders based on their past accomplishments and current political views. It also provides information about their platforms and policies that could help shape American politics moving forward into 2016 elections season!', ' One day you meet someone and fall madly in love... but there is one problem : he has a dark secret that could destroy your relationship forever. \n

The Shadow of Love (1984)\nA young man falls for an older woman, unaware she\'s married to his father.\n

Shadow of Fear (2007)\nIn this thriller set during World War II, a British spy must discover the fate of a missing scientist whose work on radar technology may turn the tide of war against Germany. As he investigates, however, he finds himself falling under the spell of a mysterious woman who seems to know more about what happened than anyone else does.\n

The Shadow of Violence (1963)\nAn ex-con returns home after serving time for murdering her husband. She soon discovers that her daughter was kidnapped by her abusive mother while she served prison time. The ex-con sets out to find her daughter before it\'s too late.\n

The Shadow of Your Smile (1965)\nAfter being discharged from military service, Steve Marshall arrives back in New York City ready to begin life as a civilian again. He meets up with old friend Mary McGrath and learns that she works as a singer/dancer at a nightclub called "Terry\'s". They go together to see Mary perform and afterwards have dinner at a nearby restaurant. While eating, Steve notices another couple sitting near them - a handsome man named Tony Banks and his beautiful date Helen. Afterwards, Steve goes over to introduce himself to Helen and learn more about her. When he asks if she would be interested in going dancing sometime, she agrees without hesitation. Later that evening when Steve calls upon Helen at her hotel room door, she invites him inside so they can talk privately away from prying ears outside listening through walls or windows. During conversation between these two strangers, something happens which causes both parties involved feel very strongly attracted towards each other immediately! It turns out later though that neither party knows exactly why yet because although they seem perfect matches physically speaking, emotionally speaking things aren't quite right just yet...\n

The Shadow of Death (1935)\nWhen a wealthy businessman dies suddenly, suspicion arises among those closest to him: His wife, son and mistress all stand accused of having had motives for killing him

off prematurely! But then again maybe none did? Or perhaps everyone DID do it?? Only time will tell..

The Shadow of Chikara (1967)

This film tells us how the Japanese samurai culture came into existence. In ancient times Japan was divided into many small kingdoms ruled by petty lords. These feudal rulers were constantly fighting amongst themselves until finally one lord became supreme leader known as Emperor Jimmu Tenno. This movie shows us how he united Japan under one rule using forceful means such as assassinations etc., but also peacefully through diplomacy negotiated treat', "

<newline> <newline> `` The sun rises over a small village in the middle of nowhere. A young man named John wakes up to find himself alone on his farm. He has no idea how he got there or what happened last night. As he wanders around looking for answers, he stumbles upon something strange : a portal leading into another world! ' ' <newline> <newline> (1) What does this otherworld look like? Is it similar to our own Earth, or completely different? How do you feel about being transported here without warning? Don't worry if your answer seems too short ; we can always expand later when more details are revealed during gameplay. <newline> <newline> (2) Who else lives inside these walls with us right now? Are they friendly neighbors who want nothing but peace between them all, or dangerous enemies waiting patiently behind every corner ready to strike at any moment? If so, then why would anyone ever leave their homes unless absolutely necessary? And even then... well let's just say that sometimes things happen outside one's control. <newline> <newline> (3) Where did everyone go after seeing me enter through those doors earlier today? Did someone call out my name before disappearing forever from sight? Or maybe nobody noticed anything unusual happening until much later down the road -- perhaps hours or days afterwards--when suddenly everything went dark again except for light coming from somewhere nearby. Maybe somebody saw something weird going on while walking past someplace else entirely unrelated. It could be anybody really. But whatever happened next was definitely not good news because now everybody knows exactly where *I* live thanks solely due to having been spotted entering said building earlier today. So yeah, pretty sure that means trouble ahead. <newline> <newline> (4) Why should I care anyway? After all, isn ' t life supposed to suck regardless whether people actually exist within its confines? Isn ' t death itself merely another form of existence which simply happens sooner rather than later? Doesn ' t time pass faster depending upon how old one gets? Aren ' t dreams themselves often times filled with images representing memories long forgotten by most individuals? Don't feelings change constantly throughout each day based off external stimuli such as weather conditions changing rapidly across vast distances simultaneously affecting millions upon billions living underneath clouds above ground level below sea levels beneath mountainsides surrounded everywhere else besides oceanside coastlines located far away beyond borders separating countries divided along lines drawn arbitrarily according political boundaries established centuries ago? <newline> <newline> (5) Okay fine enough already! Enough questions asked back-to-back consecutively nonstop continuously ad infinitum ad nauseam ad absurdum ad libitum ad nauseam ad infinitum ad nausea ad absurdum ad libitum ad nauseam", ' \n

The first time I played Civ, the only thing that kept me going was my desire to see how far I could get. It's not like there are any real goals in this game; you just keep playing until someone wins or everyone gets

bored and quits. But once I got into it, I found myself wanting more than anything else for something interesting happen - maybe an event would occur where one player suddenly became much stronger than all others (like when Gandhi becomes "Great Prophet") ; perhaps another civilisation would rise up against mine with superior technology/military might etcetera... The possibilities seemed endless! So instead of focusing on winning at every turn, which can be quite tedious after several hours spent doing nothing but building roads & cities while waiting around hoping somebody will attack soon enough so we don't have too long before our next move comes due again ... well anyway let us say instead what if instead each round consisted solely upon narrating events taking place within your own empire? What kind stories do YOU tell about yourself during these moments? How does this change things compared with simply moving units across maps without saying anything aloud except maybe some occasional grunts here n there? Let us explore together through words alone!\n

Civilization is a strategy video game developed by Sid Meier and published by MicroProse Software Inc., originally released in 1980. Inspired by Sumerian mythology, players take control over their chosen nation-state throughout humanity ' s past, guiding them through four distinct ages: Ancient Era, Classical Age, Medieval Period and Modern Times. Players must balance military conquest with technological advancement, cultural development and diplomacy among other nations. Each age has its own unique set of challenges such as warring factions vying for power or natural disasters threatening entire populations. As they progress further along their path towards victory points accumulated via research projects completed successfully lead directly toward ultimate domination over Earth itself-or even beyond!\n

In order to win the game, players need to build up their economy by constructing buildings and infrastructure necessary for production purposes including factories manufacturing goods needed elsewhere on planet earth. They also require resources extracted from mines located near mountainsides scattered across continents worldwide. These materials serve multiple functions ranging from providing food sources essential for survival during times of famine caused by drought conditions brought forth naturally occurring phenomena known collectively under term climate change. Finally, players may choose whether engage militarily combatants opposing forces attempting seize territory claimed previously established borders drawn arbitrarily between countries based historical precedent rather than geographical features present today.\n

As mentioned earlier, there exists no single way', '. \n

The first manned mission to Mars was launched in 2018 and landed successfully at a site called Acidalia Planitia. The crew of six men were led by Captain James T Kirk (William Shatner) who had previously commanded two other missions to Mars with mixed results. This time he brought along his trusty sidekick Mr Spock (Leonard Nimoy), Dr McCoy (DeForest Kelley), Lt Uhura (Nichelle Nichols), Scotty (James Doohan) & Sulu (George Takei). They found themselves stranded when their ship crash-landed due to an unknown malfunction during reentry into Earth\' s atmosphere. After several weeks without contact from NASA or anyone else back home, things started getting worse as food supplies ran low while radiation levels rose dangerously high inside their suits. Eventually all but three members died off leaving just Kirk, Spock & Bones alive. With no way out except through space itself, these brave souls set course towards Earth hoping against hope that someone would come

rescue them before it was too late...
In 2035, after years spent searching for life beyond our solar system, scientists finally made contact with aliens living on another planet within our galaxy - Mars! Unfortunately this discovery came far too late ; by then humanity had already destroyed itself via nuclear warfare which left behind nothing more than radioactive rubble scattered across what used be known simply as "Earth". Now we must rely solely upon ourselves if ever there should arise any new civilizations capable enough take up residence here once again sometime down line future generations might find some use value among those ruins left behind us long ago...', ' The offer comes with one condition : If at any point during those five additional years, you find yourself in the same situation again - facing death once more- then all 10 years will be lost forever.
The man pauses for a moment, considering his options carefully. He looks up into the eyes of this mysterious figure who stands before him, waiting patiently for his answer. Finally he speaks: "I accept! " And just like that, it was done ; no questions asked or conditions attached. With these words spoken aloud, everything changed instantly. As if by magic, time seemed to slow down around them both until finally they were alone together on some distant shore where nothing else existed but their own thoughts. There was only silence now between them - two souls connected through eternity itself. It felt like being home after so long away; safe within its embrace once more. This feeling lasted longer than either could have imagined possible ... until eventually even this brief respite came crashing down upon us once more when we realized what had happened next...
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<newline>', '..
The first time I saw the trailer, it was on a flight to New York. It's not that I don't like Tom Hanks or Emma Watson (I do), but this movie just didn't look very good at all. The premise seemed contrived and forced; the acting looked wooden and uninspired. And then there were those awful songs by Coldplay! But when I finally got around to watching the film itself, my opinion changed completely: "Larry Crowne" turned out to be one of the most charming movies I have seen recently.
Tom Hanks plays Larry Crowne, an everyman who loses his job after 28 years as a supermarket manager because he doesn't know how to use a computer. He decides to go back to school so he can get another job with better pay-but before long finds himself falling in love again with

Mercedes Tainot (Emma Watson), whom he met while she was working part-time at Walmart during her summer break from college. They start dating despite their age difference (she's only 19!) which leads them both down unexpected paths toward self discovery...
"Larry Crowne" has been criticized for being too sentimental and predictable-and yes, some scenes are definitely cheesy enough even without any help from John Mayer 's music score -but overall I found myself enjoying every minute spent inside its world thanks largely due its cast members' performances alone : Julia Roberts gives us yet another example why she remains Hollywood royalty ; Cedric The Entertainer proves once more what makes him such an underrated comedic talent ; Taraji P. Henson shows off her range beyond Cookie Lyon ; Bryan Cranston continues proving why Breaking Bad made him famous ...etc etc.. All told though? This flick works best if viewed through rose colored glasses! So grab yourself some popcorn & settle into your seat cause here comes Mr Nice Guy right now!!!, ' You have been sent here for your crimes against humanity and will be punished accordingly.
The man was clearly insane but he had an air about him that suggested he might actually believe what he said. The woman looked at me with fear in her eyes as she tried desperately not to look away from my gaze. I could see it on her face ; she knew this wasn ' t real. She just didn ' t want anyone else knowing how crazy things were getting inside her head.
I turned back towards the doorway where we entered only moments before. There stood another figure dressed all in black except for his white mask which covered half his face leaving only two holes through which dark brown eyes stared out into nothingness. He held up something shiny like metal or glass in front of himself so that both myself and the woman couldn ' t make out exactly what it was until he brought it closer still revealing itself to be some sort of knife blade attached onto either end via chains. As soon as our eyes met those of the newcomer there came over us both feelings of dread mixed together with excitement. We felt compelled to follow wherever he led even though deep down within ourselves we knew better than anything else ever would. It seemed impossible yet somehow undeniable that whatever fate awaited us beyond these doors lay waiting patiently for its next victims.
As if reading our minds without uttering any words aloud, the stranger spoke directly into each person ' s mind saying " Come " while pointing toward the entrance behind them. Without hesitation nor question we obeyed immediately walking forward slowly enough so as not to draw attention too quickly but fast enough so as not lose sight of whoever was leading us deeper into darkness unknown. With every step taken further away from light became more apparent until finally after several minutes passed completely silent save for footsteps echoing off stone walls around us suddenly stopped altogether. At last having reached their destination, our guide motioned silently once again indicating that now was time for action. Taking hold tightly onto each other ' s hands firmly grasped between fingers, we began moving swiftly across floorboards creakily groaning underneath heavy weight placed upon them. After traversing lengthy corridors filled with dust particles floating lazily throughout space above heads, eventually reaching final destination : A large wooden double-door set flush against wall opposite side room containing single window looking outside world beyond. Upon opening door slightly crack open enough allow peek inside revealed scene unlike anywhere seen previously during entire journey thus far. Inside dimly lit chamber sat three

figures seated comfortably upon ornate leather couches arranged neatly along perimeter facing center area occupied solely by massive oaken table surrounded by candles burning brightly illuminating everything present momentarily. One individual appeared older than rest seemingly serving role leader among', "\n\nThe Dragon Marked Warrior () : A warrior who has been marked by a dragon as their protector. They are usually very powerful, but they have to be careful not to anger or betray their dragons lest they lose that protection forever. The mark itself can take many forms; some people get tattoos while others may simply see an image appear on them when they look at themselves in mirrors. In either case though, once someone gets one then no matter what happens later down life path, if anything bad ever does happen then chances are good that whatever happened was caused directly because something went wrong between him/her & his/her respective dragon guardian!\n\nDragon Marked Heroes: These heroes are chosen by fate to protect humanity from evil forces such as demons and monsters alike! Their powers come from within rather than being granted externally like most other types do so these guys tend towards having more natural abilities compared against those whose strength comes solely through magic spells etc.. As long as he stays true himself however even without any special gifts bestowed upon him still stands ready fight back whenever needed regardless how dire situation might seem initially.\n\nDragon Marked Mage: This type tends toward using arcane arts instead relying heavily upon physical prowess alone which makes sense since mages typically lack access certain kinds weapons found commonly among fighters today. But don't let appearances fool ya - despite looking weak physically speaking these folks often possess incredible mental fortitude allowing them overcome obstacles easily enough given time spent studying various tomes containing knowledge passed down generations ago via scrolls written centuries before modern era began taking place nowadays...\n\nDragon Marked Priests: These holy men serve gods known only unto themselves yet somehow manage find ways connect spiritually with followers around world helping guide souls safely across threshold separating mortal realm immortality beyond reach mere humans could hope achieve someday soon hopefully anyway...\n\nDragon Marked Monk: These masters martial arts practice diligently every day striving perfect balance mind body soul seeking enlightenment wisdom peace harmony order universe ultimately attaining highest level possible becoming living embodiment Buddha Dharma teaching all sentient creatures truth reality existence itself.\n\nDragon Marked Witcher: These wizards use dark sorcery conjure up spirits summon forth demons cast curses hex potions poisons venoms elixirs concoct brews incantations rituals rites ceremonies invocations evocation exorcisms banishments purifications cleansings blessings consecration dedication veneration adoration worship obeisance homage reverence devotion piety humility submission subservience servitude fealty allegiance loyalty faith belief trust confidence assurance certitude conviction confirmation verification validation affirmation ratification sanction approval endorsement support agreement accord concurrence consent acquiesce compliance accession acceptance recognition acknowledgement appreciation gratitude thanks praise admiration respect honor esteem regard dignify elevate glam", '\n\nThe Monsters Under Your Bed (2017)\n\nA young boy is terrified by his nightmares, but when he discovers that they are real and lurking underneath his bed, he must find out how to

defeat them.', ' The next day, your friend tells everyone that he saw a ghost and they all laugh at him. \n\nThe next weekend, you go back with some of your other friends for another round of dares. This time, someone suggests playing hide-and-seek. Everyone agrees except for you because you know what happened last time. But then again, maybe this is just an urban legend? Maybe there really are no such things as ghosts or haunted places? So you decide to play anyway. \n\nYou start counting down from 10 when suddenly something grabs hold of your leg! It feels like its trying to pull me towards somewhere else but I can 't move my legs anymore so instead i scream out loud hoping somebody will hear me. Then everything goes black....', '\n\nI\'m not sure what you mean by "their own" in the first sentence. I think it should be "their own". \n\nThe second paragraph is a bit confusing, but I get your point about how people are always trying to make themselves look better than they really are. It would help if there was some sort of transition between that and the third paragraph though. Maybe something like: "But no matter who we are or where we come from, everyone has their flaws." That way it will seem more natural instead of jumping straight into talking about flaws without any build up.', "\n\nThe first thing I noticed was the smell. It wasn't like any other classroom in my life, but it reminded me of a place that had been there for years and years, where people came together every day to learn about things they were passionate about or just wanted to know more about. The second thing I realized is how much fun this new teacher seemed to be having with his students! He would ask questions without waiting for an answer from anyone else before moving on ; he made sure everyone felt included by asking them what their favorite color might be (mine happens to be blue) so we could all share our answers at once instead of taking turns answering one question after another until someone got bored enough not even bothering anymore because no matter who answered last time around nobody ever remembered anything anyway. And then finally when everything else has happened already? Well then comes lunch break which means food time again! So yeah...this guy knows exactly what makes kids tick : good ol'fashioned fun stuff mixed up into some kinda educational experience too boot! <newline> <newline> Now let us talk briefly about why you should consider becoming part of such an amazing program yourself: First off, if your goal is simply getting paid while doing nothing productive during those hours between 9am-3pm Monday through Friday then look elsewhere cause here at School Of Life Academy we believe strongly in giving back as well as receiving rewards. Secondly, unlike most schools out there today whose curriculum consists mostly of memorizing facts & figures rather than actually learning anything useful along way towards achieving success later down road, SLA offers courses designed specifically help individuals develop skills necessary succeed both personally professionally alike. Finally, since tuition fees are kept low compared similar institutions nearby due lack funding sources available locally, enrolling now will save money long run allowing student focus solely studies rather worrying whether paycheck coming soon enough cover expenses related living costs associated attending college fulltime schedule. <newline> <newline> In conclusion, joining ranks among thousands others currently pursuing degrees online via distance education programs offered exclusively through SchoolLifeAcademy website provides unparalleled opportunity grow intellectually spiritually socially emotionally

physically mentally financially etcetera. With flexible schedules tailoring individual needs plus affordable rates making dreams come true easier than ever imagine possible, signing up right away may prove best decision ever make! Good luck!", 'I'm not sure what to do with this. I don't want to be an atheist, but it seems like there is no other option for me right now. It feels so wrong and unnatural to think about God in any way except as my enemy. But then again, if he really was my friend, wouldn't he have been more merciful than this? Wouldn't he have given me some kind of sign or something? Maybe I just need to pray harder...No! That can't be true. If prayer worked, everyone who ever lived would already know everything they needed to know about how to live their lives without making mistakes. And yet here we are : still struggling through our days trying desperately to figure out which path will lead us closer to heaven while simultaneously keeping away from hell. How could such a thing possibly exist when there is supposedly only one god? One perfect creator whose sole purpose should be to guide his creation towards perfection? The answer must lie somewhere between those two extremes ; either God doesn ' t care enough about humanity (which makes him less powerful) or else He does care too much (which means He isn ' t omniscient). Either way, though, neither possibility fits well within Christian doctrine. So maybe instead of looking outside ourselves for answers, perhaps we ought look inside first? After all, Jesus said " Ask, seek, knock " three times before giving anyone anything good ...The problem with religion is that it requires faith - blind trust in things you cannot see nor prove. Faith may work wonders on occasion, but ultimately it leaves people vulnerable because they rely entirely upon hope rather than evidence. This lackadaisical approach has led many down paths filled with darkness and despair. In fact, according to statistics compiled by Pew Research Center, 70 percent of Americans believe in Heaven despite having never seen proof beyond scripture alone. Even worse, nearly half say they feel confident knowing where they stand eternally even after admitting they haven't read any books written specifically about Hell. What sort of person would choose ignorance over knowledge? Someone afraid perhaps? Or someone unwilling to accept responsibility for themselves? Whatever your reason might be, please consider taking action today. Donate money directly into charities dedicated toward helping others find peace during difficult times. Volunteer time working alongside organizations focused around improving education levels among children living below poverty line standards. Get involved politically wherever possible supporting candidates committed fully towards creating positive change throughout society. Do whatever works best for YOU personally however remember always keep moving forward regardless circumstances encountered along journey ahead. Because once begun nothing stops until completion achieved successfully completed goal reached finally accomplished dreams fulfilled forevermore.\nSo let go of fear allow yourself become free discover truth hidden deepest parts heart mind soul spirit body', " What is the nature of this world?\nThe first thing I did was make it so that there were no other gods. This meant that my godhood would be unchallenged, which made me feel better about myself (I'm not sure why). Then I decided on what kind of place I wanted to live in: A desert with mountains and rivers running through it. The only problem was how big should it be? If too large then people might get lost or confused but if too small they wouldn't have enough

always get what you want. But if you try sometimes, well... you might find you get what you need.''' -- Mick Jagger & Keith Richards, British rock band Rolling Stones (1964) <newline> <newline> `` Life is short, so live fast. And while you're living, take chances. Make mistakes. Get messy. Be bold. Whenever possible, go first. Live without regret. Love hard. Laugh often. Forgive quickly. Take risks. Give back. Keep smiling. Never give up on yourself or anyone else. Enjoy this moment. This day. Right now. Because tomorrow isn ' t promised. So don ' t wait for anything. Just go out there and start doing things. Do everything you can today because someday will come too late. " -", ' The genie grants it and you wake up as a 30 year old man with all of his memories intact, but he is still in high school. What do you do?\nAsked by: Jared (126) May 9, 2014', ' Your favorite pastime is playing guitar and singing songs about your life as an angel before falling from grace (which was really just because God told you to do it). The only thing that bothers you more than being stuck down here for eternity is having to listen to all those other souls whining about their lives when they were alive. So one day while sitting around with some friends, you decide to start up a band called "The Damned Souls". It becomes quite popular among the denizens of hell, so much so that even Satan himself starts coming out to see them play! One night after a show he approaches you backstage and says : `` Hey man, I love what yer doing with this group. But there\'s something missing... \'\' He then proceeds to tell you his idea for adding another member who can sing lead vocals. After hearing him out, you agree on bringing in a new singer named Lucifer Morningstar. Things go well at first until Lucifer decides to take over management duties. This leads to constant arguments between yourself and Lucifer regarding everything from song selection to stage lighting. Eventually things get so bad that you end up quitting the band altogether. As soon as word gets out about your departure, everyone else follows suit leaving nothing behind except empty seats where once stood thousands upon thousands of screaming fans. Nowadays nobody knows exactly why or how it happened ; maybe it had something to do with Satan getting bored? Whatever caused it though, no matter how hard anyone tries, not even Satan himself has ever managed to put together anything close enough again since then.

<newline> <newline> -- - <newline> <newline> **Satan** <newline> <newline> *You* have been my greatest enemy throughout history. We fought many battles against eachother, yet we never truly understood our differences. Until now... <newline> <newline> Today marks 10 years since we last met face-to-face. In honor of this occasion, let us reflect on our relationship thus far: <newline> <newline> *I am the ruler of Hell.* <newline> <newline> *You are its most famous resident. * <newline> <newline> *We share similar goals. * <newline> <newline> *But unlike me, you seek power through music instead of violence. * <newline> <newline> *And although we may disagree sometimes, deep inside we both want what\'s best for humanity. * <newline> <newline> *So today, let us celebrate our friendship by raising glasses filled with blood wine. May these drinks bring us closer together forevermore. Cheers! * <newline> <newline> -- - <newline> <newline> **Lucifer Morningstar** <newline> <newline> *Dearest friend, thank you for inviting me into your home tonight. It means alot knowing that despite our differences, we still care deeply about eachother. And yes, i too believe that humans deserve better than what they currently receive. That\'s why i created

this organization known simply as L. M. Our goal', " You scream out loud as he begins to laugh at you. He then proceeds to tell you that this was all his plan from the beginning. That everything has been leading up to this moment...
The next morning, you awaken with a startle. Your heart races as you realize what happened last night. It was just another dream, right? Wrong! This time when you get ready for work, there's no one else around except yourself. The same thing happens everyday after that. No matter how hard you try, nobody can be found anywhere near where you are. Even if they were standing directly behind you, you would never know because of their lack of presence. After months go by like this, you finally decide to leave town. But before doing so, you make sure to pack some essentials : food, water, clothes, etc. Then once again, nothing seems amiss until suddenly someone walks into view while passing through an intersection. They seem familiar somehow though not quite recognizable enough yet still unsettlingly close enough that makes them feel almost too realistic even though clearly imaginary.

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", ' He says "Thank you for giving me this money. I have been working hard all year and now it's time to take my vacation."
You say, "I don't understand, why are you taking a vacation?" The old man replies with a smile on his face saying "Well sonny boy, every Christmas Eve I go around the world delivering presents to children who were good that year. But today I am going back home because its time for me to retire from being Santa Clause!"

The little girl was so excited she jumped out of her seat screaming "Santa Clause is real!!" Her mother quickly grabbed hold of her daughter and said "Honey please sit down we still need to finish our dinner before bedtime." As they sat at their table eating dinner the little girls mind kept wandering off thinking about what happened earlier in the day. She couldn ' t stop wondering if there really was such thing as magic or not. After finishing supper mommy took her child by hand outside onto the porch where they could see stars twinkling above them. They both stood silently looking up towards heaven until suddenly something caught mommies eye. It looked like someone had written some words across one star but then again maybe it wasn ' t just any ordinary person writing those letters afterall....

"Momma look! Is that Santa Clauses sleigh?" asked the young girl pointing toward an object shining brightly against dark skyline. Mama replied "Yes honey dearest, yes indeedy doo! That sure does seem like ol Saint Nick himself flying through space right here tonight! Now let us

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 "The most important thing in my life is..." (10-25 sentences)', '2018. \nThe man
 is still standing there, looking at you with his mouth open. He looks like he
 wants to say something but cann\'t find the words. Finally he says : "I know
 what I want for Christmas this year! \'\'\nYou look back at him confused as
 hell. The guy then pulls out an old revolver from underneath his coat and points
 it right between your eyes.\n"I WANT YOU DEAD! \'\'\nHe fires once... twice..
 thrice... four times... five times... six times... seven times... eight
 times... nine times... ten times... eleven times... twelve times... thirteen
 times... fourteen times... fifteen times... sixteen times... seventeen times...
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 time... hundred seventeenth time... hundred eighteenth time... hundred
 nineteenth time... hundred twentieth time... hundred twenty first time...
 hundred twenty second time... hundred twenty third time... hundred twenty fourth
 time... hundred twenty', "\nI'm not sure if I want any more tattooes. But, it
 would be cool to have one that matches my husband's. We are both getting older
 and our bodies change so much as we get older...it might just happen
 naturally!", "\nThe next morning you get out of bed with a smile on your face
 because it's another beautiful sunny day. The birds are chirping outside, and
 there is an amazing smell coming from downstairs where breakfast has been cooked
 for you by someone who loves you more than anything else in this world. As soon

[illegible]

you're looking for something healthier than just plain old pepperoni or sausage on your slice! If this sounds like what would make YOU happy then head over there right away because they close at 10pm every night (except Sundays). You can find them located near the entrance/exit doors so don't worry about getting lost while trying out new flavors from around town--just follow these directions until reaching their location :)\n- Burger King - This fast food joint offers burgers made fresh daily using only high quality ingredients such as ground beef cooked to perfection before being served hot off its grill. Their menu includes everything from classic hamburgers all way down through veggie options too, which means everyone will love eating here no matter how picky he might seem! Just remember though : Don 't forget those fries ;)\n- Subway Sandwich Shop - Located inside one corner of our mall, this place specializes in making sandwiches filled with meatballs, ham, turkey breast etcetera... It's perfect choice when hunger strikes hardest during lunch break time since it opens early morning till late evening hours each day except Sunday where closing times vary depending upon demand level. So whether u want breakfast meal consisting mostly eggs & bacon OR dinner comprising mainly chicken wings accompanied by potato wedges alongside coleslaw side dish --this establishment got covered both ways without fail!\n- Chick Fil A - For those who prefer more traditional fare, look no further than Chic Fil A restaurant chain known worldwide thanks largely due popularity among kids everywhere especially young ones whose parents take advantage opportunity teach them manners proper etiquette required interacting people outside family circle. Here, customers are greeted warmly regardless age group present thus ensuring pleasant experience overall. And yes, we do mean literally EVERYONE gets treated equally well here ;)\n- Starbucks Coffee House - Finally, let us not forget coffee lovers amongst us who crave strong brew prepared perfectly according taste buds desire. Whether black white mocha latte whatever else ur fancy may be, rest assured knowing staff members behind counter always ready serve yummy drinks quickly efficiently possible. Plus, free WiFi available throughout entire premises makes staying connected easy breezy even when traveling abroad faraway lands. All things considered", '\n\nThe first time I saw her, she was sitting on top of a tree. She had long brown hair and wore a white dress that flowed in the wind as if it were alive itself. Her eyes sparkled like diamonds when they caught sunlight, but there was something about them that made me feel uneasy. They seemed to be looking right through me--like they knew everything about who I really am deep down inside my soul. As soon as our gazes met for just an instant before turning away again, all thoughts left my mind except one: "I want this woman more than anything else ever has or will exist." And so began our journey together...\n\nA boy asked a girl out at lunch today. He sat across from her with his hands clasped tightly behind his back while he nervously stared into space waiting for some sort of response. Finally after what felt like hours later (but probably wasn ' t) she looked up slowly towards him saying nothing until finally breaking eye contact by blushing deeply red then quickly standing up leaving without another word spoken between them both. The whole thing lasted less than five minutes total yet somehow managed to leave such an impression upon us both ; we couldn ' t stop thinking about each other even though neither party said much during those few moments spent alone together. <newline> <newline> <newline> <newline> <newline> <newline> <newline>

sitting in the corner of his room, staring at nothing. He had been there since he woke up and he didn't know how long ago that was. His eyes were bloodshot from crying but they still managed to look empty as if all life has left them. The only thing moving about him is his hand which occasionally twitches when he thinks no-one can see him. It wasn't until now though that I noticed something else. There are two holes in his chest where his heart should be. They aren't bleeding or anything like that ; just gaping black holes with red around their edges. As soon as I saw this my mind started racing trying to figure out what could have happened here. Was someone playing some kind of sick joke? Or maybe he did this himself somehow? But then why would anyone want to do such a horrible thing? And even if you wanted to kill yourself wouldn't you use your own hands instead of leaving it to chance? These questions kept running through my head over and over again while I sat frozen in place unable to move an inch. Finally after what seemed like hours (although really it was probably less than five minutes) I decided enough was enough. If nobody came back anytime soon I might never leave so I got off my chair walked slowly towards the door opened it and stepped outside into the hallway. Once inside I closed the door behind me and looked both ways down the corridor before turning right and walking away. After several minutes of walking I finally reached another set of doors leading onto the main floor. When I pushed open these doors I found myself standing in front of a large window looking out across the city below. This view always made me feel calm whenever I needed to relax so today was no exception. However unlike most days I couldn't help feeling uneasy because every time I turned my gaze away from the scenery beyond the glass pane I felt compelled to turn back immediately afterwards. Eventually curiosity won out however and I forced myself to keep looking straight ahead despite knowing full well what lay waiting for me once I dared take my eyes off whatever distraction caught hold of them. Sure enough within seconds of doing so I spotted her standing directly opposite me watching me intently. She wore dark clothing covering everything apart from her face which appeared pale white against its surroundings making her seem almost ghostly. Her hair hung loose around her shoulders reaching nearly half way down her back giving her an ethereal appearance. For a moment we simply stood facing each other without saying anything neither wanting nor needing words between us. Then suddenly she spoke " You must come with me " she said softly yet firmly causing goosebumps to rise along my arms. Without hesitation I nodded yes and followed her silently out of the building heading deeper into town. We continued walking side by side for quite sometime passing many people who gave us curious looks but none stopped us', "... and you will have described me. (1)\n

The first thing that struck me about this book was how much I loved the writing style of it, which is very different from most fantasy books out there today. The author has an incredible way with words and his descriptions are so vivid they almost come to life on their own. He also does not shy away from using big words or long sentences when he needs them but never at the expense of clarity. This makes for some really beautiful prose throughout the novel as well as some great dialogue between characters who often speak like real people would rather than just saying what they need to say without any emotion behind it. It's hard enough finding good writers these days let alone ones whose work stands up against classics such as Tolkien's Lord Of The Rings series ; however, if anyone

screen before but nothing as strange as what happened with me today. It was just one of those days where everything seemed off from start to finish..

```

D°Ñ\x81D,D%D%D²DµD%D,D¹ D´D»Ñ\x8f D,D%D·D°D%D±D,D¶DµD%D,D¹ D³D%D²D%D, D²
D;DµÑ\x80D³D,D%D, D, D¢DµÑ\x82DµÑ\x81Ñ\x82D²D,D, D, D\x91DµÑ\x87DµD%D,D, D,
D\x92D,D´DµD%D,D, D, D\x97D°D²D,D´DµD%D,D, D, D\x94D°D²D,D´DµD%D,D, D,
D\x90D°D²D,D´DµD%D,D, D, D\x9dD°D²D,D´DµD%D,D, D, D\x93D°D²D,D´DµD%D,D, D,
D\x9aD°D²D,D´DµD%D,D, D, D\x95D°D²D,D´DµD%D,D, D, D\x9fD°D²D,D´DµD%D,D, D,
D\x96D°D²D,D´DµD%D,D, D, D\x98D°D²D,D´DµD%D,D, D, D\x9bD°D²D,D´DµD%D,D, D,
D\x9eD°D²D,D´DµD%D,D, D, D\x8eD°D²D,D´DµD%D,D, D, D\x8cD°D²D,D´DµD%D,D, D,
D\x89D°D²D,D´DµD%D,D, D, D\x8aD°D²D,D´DµD%D,D, D, D\x8bD°D"]

```

[25]: `import matplotlib.pyplot as plt`

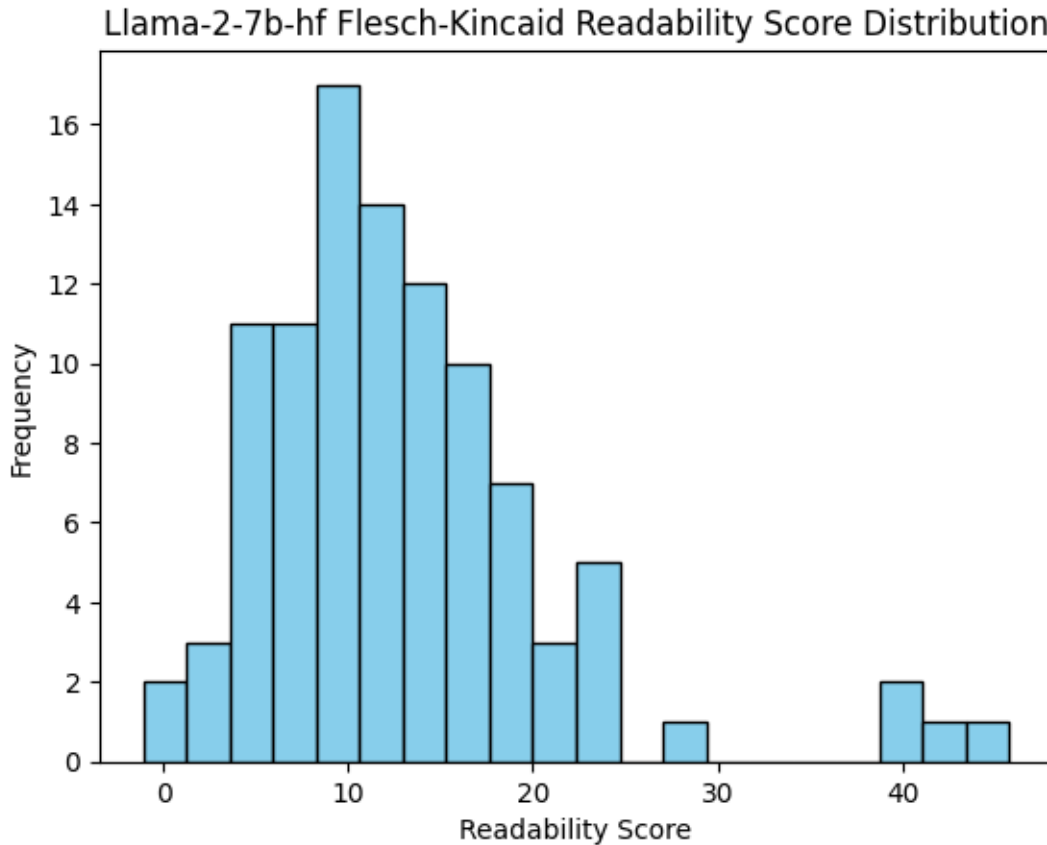
```

# plt.hist(readability_baseline, bins=20, color='skyblue', edgecolor='black')
# plt.title('Baseline Model Flesch-Kincaid Readability Score Distribution')
# plt.xlabel('Readability Score')
# plt.ylabel('Frequency')
# plt.savefig('readability_distribution_baseline.png')
# plt.show()

# plt.hist(readability_base_model, bins=20, color='skyblue', edgecolor='black')
# plt.title('Base Model Flesch-Kincaid Readability Score Distribution')
# plt.xlabel('Readability Score')
# plt.ylabel('Frequency')
# plt.show()

plt.hist(readability_model, bins=20, color='skyblue', edgecolor='black')
plt.title('Llama-2-7b-hf Flesch-Kincaid Readability Score Distribution')
plt.xlabel('Readability Score')
plt.ylabel('Frequency')
plt.savefig('readability_distribution_Llama-2-7b-hf.png')
plt.show()

```



3.1.2 Lexical Diversity

```
[ ]: def lexical_diversity(text):  
    words = text.split() # Tokenize the text into words  
    unique_words = set(words) # Find unique words  
    return len(unique_words) / len(words) # Calculate lexical diversity  
  
def evaluate_lexical_diversity_with_pipeline(pipeline_model, test_dataset):  
  
    scores = []  
    for entry in test_dataset:  
        match = instruction_pattern.match(entry['formatted_text'])  
        if match:  
            instruction, target = match.groups()  
            pipe = pipeline(task="text-generation", model=pipeline_model,   
↪return_full_text=False, tokenizer=tokenizer, temperature=0.5,   
↪repetition_penalty=1.5, device=0, max_length=len(instruction)+256)  
            generated_text = pipe(instruction)[0]['generated_text']
```

```

        score = lexical_diversity(generated_text)
        scores.append(score)
    return scores

def evaluate_lexical_diversity_baseline(test_dataset):
    scores = []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
            instruction, target = match.groups()
            score = lexical_diversity(target)
            scores.append(score)
    return scores

def evaluate_lexical_diversity_on_outputs(outputs):
    scores = []
    for output in outputs:
        score = lexical_diversity(output)
        scores.append(score)
    return scores

baseline_diversity_scores = evaluate_lexical_diversity_baseline(test_dataset)
print("Baseline Lexical Diversity:", baseline_diversity_scores)

# diversity_scores = evaluate_lexical_diversity_with_pipeline(model,
# ↪test_dataset)
# print("Fine-tuned Lexical Diversity:", diversity_scores)

diversity_scores = evaluate_lexical_diversity_on_outputs(outputs)
print("Fine-tuned Lexical Diversity:", diversity_scores)

```

Baseline Lexical Diversity: [0.492845786963434, 0.45878136200716846, 0.437125748502994, 0.41948051948051945, 0.3371900826446281, 0.44136460554371004, 0.37453646477132263, 0.4577205882352941, 0.4630681818181818, 0.6159420289855072, 0.47129186602870815, 0.4896142433234421, 0.36492890995260663, 0.456, 0.3190883190883191, 0.6, 0.43005952380952384, 0.3815142576204523, 0.3990554899645809, 0.4527027027027027, 0.3688888888888889, 0.403470715835141, 0.4119922630560928, 0.4305912596401028, 0.5024271844660194, 0.4222222222222222, 0.44045368620037806, 0.5968992248062015, 0.5053003533568905, 0.5269709543568465, 0.4684385382059801, 0.5111111111111111, 0.548828125, 0.648854961832061, 0.44981412639405205, 0.4835589941972921, 0.2570869990224829, 0.38838475499092556, 0.3455818022747157, 0.42248722316865417, 0.5205183585313174, 0.43338008415147267, 0.38883447600391774, 0.4864864864864865, 0.2736583367472347, 0.3262279888785913, 0.3709122203098107, 0.3751233958538993, 0.5576407506702413, 0.363953488372093, 0.42479108635097496, 0.42946708463949845, 0.5787234042553191, 0.5656565656565656, 0.4141331142152835, 0.4468864468864469, 0.524, 0.36324786324786323, 0.5167785234899329,

0.25841436050860134, 0.2843881856540084, 0.3798076923076923, 0.5530973451327433, 0.327710843373494, 0.5391014975041597, 0.38646482635796975, 0.5296912114014252, 0.5379746835443038, 0.3417561591914087, 0.3174083769633508, 0.40191897654584224, 0.3847167325428195, 0.59375, 0.4005305039787798, 0.28696548171045855, 0.4169139465875371, 0.5786516853932584, 0.49382716049382713, 0.5254691689008043, 0.45925925925925926, 0.3914590747330961, 0.35360245273377616, 0.4969818913480885, 0.6227544910179641, 0.491869918699187, 0.2833957553058677, 0.425, 0.48031496062992124, 0.4752252252252252, 0.43609022556390975, 0.4168591224018476, 0.5014084507042254, 0.3888, 0.5092936802973977, 0.5526315789473685, 0.42334739803094235, 0.4787430683918669, 0.33432171979243885, 0.6061776061776062, 0.5451713395638629]

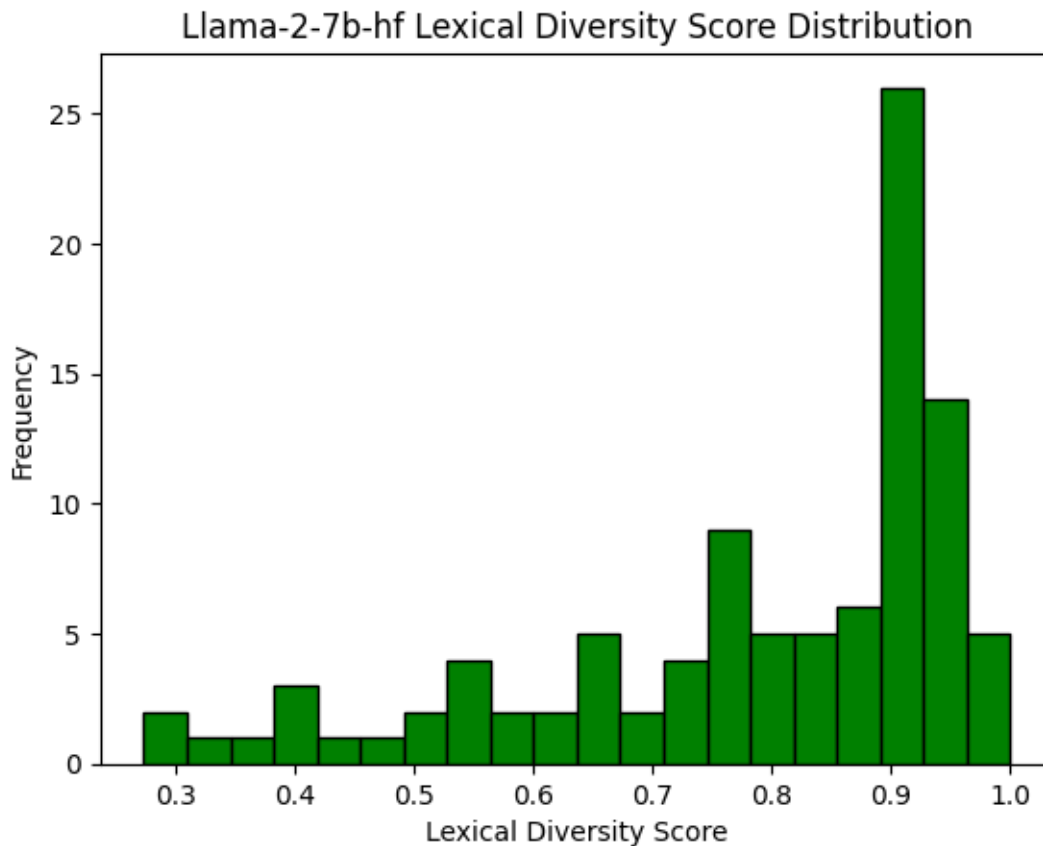
Fine-tuned Lexical Diversity: [0.9108910891089109, 0.8962655601659751, 0.8709677419354839, 0.72782874617737, 0.6602209944751382, 0.8148148148148148, 0.926829268292683, 0.9312977099236641, 0.9229074889867841, 0.8445475638051044, 0.9045553145336226, 0.9534883720930233, 0.6787709497206704, 0.9534883720930233, 0.9605263157894737, 0.7588235294117647, 0.3870967741935484, 0.8099547511312217, 0.9145496535796767, 0.549618320610687, 0.3415384615384615, 0.8208092485549133, 0.9291338582677166, 0.49146757679180886, 0.9256198347107438, 0.810304449648712, 0.5625, 0.4069264069264069, 0.44017094017094016, 0.9287410926365796, 0.9444444444444444, 0.713855421686747, 0.9041095890410958, 0.9538834951456311, 0.9230769230769231, 0.9084249084249084, 0.9181585677749361, 0.5881006864988558, 0.9133858267716536, 0.4860813704496788, 0.6716417910447762, 0.6261682242990654, 0.9166666666666666, 0.9322916666666666, 0.3761467889908257, 0.9194214876033058, 0.8936170212765957, 0.6073170731707317, 0.9196675900277008, 0.3009009009009009, 0.9176954732510288, 0.7770961145194274, 0.8586723768736617, 0.8946188340807175, 0.9372693726937269, 0.5562700964630225, 0.8757961783439491, 0.8202020202020202, 0.9235807860262009, 0.9459459459459459, 0.9153846153846154, 0.9108910891089109, 0.9066339066339066, 0.8799171842650103, 0.7597765363128491, 0.7594202898550725, 0.9743589743589743, 0.7572614107883817, 0.5627118644067797, 0.8913043478260869, 0.9041095890410958, 0.41475409836065574, 0.9458128078817734, 0.4913494809688581, 0.74609375, 0.751269035532995, 1.0, 0.2725118483412322, 1.0, 0.9640287769784173, 0.8888888888888888, 0.7336561743341404, 0.9141104294478528, 0.8470948012232415, 0.9166666666666666, 0.8696969696969697, 0.7131979695431472, 0.5655172413793104, 0.6678200692041523, 0.8112094395280236, 0.9338235294117647, 0.668769716088328, 0.963855421686747, 0.6923076923076923, 0.7532467532467533, 0.6433566433566433, 0.948905109489051, 0.8424657534246576, 0.7505154639175258, 0.811965811965812]

```
[26]: # plt.hist(baseline_diversity_scores, bins=20, color='green', edgecolor='black')
# plt.title('Baseline Lexical Diversity Score Distribution')
# plt.xlabel('Lexical Diversity Score')
# plt.ylabel('Frequency')
# plt.savefig('lexical_diversity_baseline.png')
# plt.show()

plt.hist(diversity_scores, bins=20, color='green', edgecolor='black')
plt.title('Llama-2-7b-hf Lexical Diversity Score Distribution')
plt.xlabel('Lexical Diversity Score')
```



```
plt.ylabel('Frequency')
plt.savefig('lexical_diversity_Llama-2-7b-hf.png') # Save the plot as an image
plt.show()
```



3.1.3 BERTScore

```
[ ]: import locale
      locale.getpreferredencoding = lambda: "UTF-8"
      !pip install bert_score
```

Collecting bert_score

Downloading bert_score-0.3.13-py3-none-any.whl (61 kB)

61.1/61.1 kB

776.2 kB/s eta 0:00:00

Requirement already satisfied: torch>=1.0.0 in

/usr/local/lib/python3.10/dist-packages (from bert_score) (2.1.0+cu118)

Requirement already satisfied: pandas>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from bert_score) (1.5.3)

Requirement already satisfied: transformers>=3.0.0 in

/usr/local/lib/python3.10/dist-packages (from bert_score) (4.31.0)

Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages (from bert_score) (1.23.5)

Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from bert_score) (2.31.0)

Requirement already satisfied: tqdm>=4.31.1 in /usr/local/lib/python3.10/dist-packages (from bert_score) (4.66.1)

Requirement already satisfied: matplotlib in /usr/local/lib/python3.10/dist-packages (from bert_score) (3.7.1)

Requirement already satisfied: packaging>=20.9 in /usr/local/lib/python3.10/dist-packages (from bert_score) (23.2)

Requirement already satisfied: python-dateutil>=2.8.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=1.0.1->bert_score) (2.8.2)

Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=1.0.1->bert_score) (2023.3.post1)

Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from torch>=1.0.0->bert_score) (3.13.1)

Requirement already satisfied: typing-extensions in /usr/local/lib/python3.10/dist-packages (from torch>=1.0.0->bert_score) (4.5.0)

Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages (from torch>=1.0.0->bert_score) (1.12)

Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-packages (from torch>=1.0.0->bert_score) (3.2.1)

Requirement already satisfied: Jinja2 in /usr/local/lib/python3.10/dist-packages (from torch>=1.0.0->bert_score) (3.1.2)

Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages (from torch>=1.0.0->bert_score) (2023.6.0)

Requirement already satisfied: triton==2.1.0 in /usr/local/lib/python3.10/dist-packages (from torch>=1.0.0->bert_score) (2.1.0)

Requirement already satisfied: huggingface-hub<1.0,>=0.14.1 in /usr/local/lib/python3.10/dist-packages (from transformers>=3.0.0->bert_score) (0.19.4)

Requirement already satisfied: PyYAML>=5.1 in /usr/local/lib/python3.10/dist-packages (from transformers>=3.0.0->bert_score) (6.0.1)

Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.10/dist-packages (from transformers>=3.0.0->bert_score) (2023.6.3)

Requirement already satisfied: tokenizers!=0.11.3,<0.14,>=0.11.1 in /usr/local/lib/python3.10/dist-packages (from transformers>=3.0.0->bert_score) (0.13.3)

Requirement already satisfied: safetensors>=0.3.1 in /usr/local/lib/python3.10/dist-packages (from transformers>=3.0.0->bert_score) (0.4.1)

Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib->bert_score) (1.2.0)

Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-packages (from matplotlib->bert_score) (0.12.1)

Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib->bert_score) (4.45.1)

Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib->bert_score) (1.4.5)
Requirement already satisfied: pillow>=6.2.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib->bert_score) (9.4.0)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib->bert_score) (3.1.1)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests->bert_score) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests->bert_score) (3.6)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests->bert_score) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests->bert_score) (2023.11.17)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-packages (from python-dateutil>=2.8.1->pandas>=1.0.1->bert_score) (1.16.0)
Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.10/dist-packages (from jinja2->torch>=1.0.0->bert_score) (2.1.3)
Requirement already satisfied: mpmath>=0.19 in /usr/local/lib/python3.10/dist-packages (from sympy->torch>=1.0.0->bert_score) (1.3.0)
Installing collected packages: bert_score
Successfully installed bert_score-0.3.13

```
[ ]: from bert_score import score

def evaluate_bert_score_with_pipeline(pipeline_model, test_dataset):
    P_scores, R_scores, F1_scores = [], [], []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
            instruction, target = match.groups()
            pipe = pipeline(task="text-generation", model=pipeline_model,
↪return_full_text=False, tokenizer=tokenizer, temperature=0.5,
↪repetition_penalty=1.5, device=0, max_length=len(instruction)+256)
            generated_text = pipe(instruction)[0]['generated_text']
            P, R, F1 = score([generated_text], [target], lang='en')
            P_scores.append(P.mean().item())
            R_scores.append(R.mean().item())
            F1_scores.append(F1.mean().item())
    return P_scores, R_scores, F1_scores

def evaluate_bert_score_baseline(test_dataset):
    P_scores, R_scores, F1_scores = [], [], []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
```

```

        instruction, target = match.groups()
        P, R, F1 = score([target], [target], lang='en')
        P_scores.append(P.mean().item())
        R_scores.append(R.mean().item())
        F1_scores.append(F1.mean().item())
    return P_scores, R_scores, F1_scores

def evaluate_bert_score_on_outputs(outputs):
    P_scores, R_scores, F1_scores = [], [], []
    for output in outputs:
        P, R, F1 = score([output], [output], lang='en')
        P_scores.append(P.mean().item())
        R_scores.append(R.mean().item())
        F1_scores.append(F1.mean().item())
    return P_scores, R_scores, F1_scores

# P_scores, R_scores, F1_scores = evaluate_bert_score_with_pipeline(model,
# ↪test_dataset)
P_scores_baseline, R_scores_baseline, F1_scores_baseline =
# ↪evaluate_bert_score_baseline(test_dataset)
P_scores, R_scores, F1_scores = evaluate_bert_score_on_outputs(outputs)

```

```

config.json: 0%|          | 0.00/482 [00:00<?, ?B/s]
vocab.json: 0%|          | 0.00/899k [00:00<?, ?B/s]
merges.txt: 0%|          | 0.00/456k [00:00<?, ?B/s]
model.safetensors: 0%|          | 0.00/1.42G [00:00<?, ?B/s]

```

```

[29]: # # Precision Plot
# plt.plot(P_scores_baseline, label='Precision', color='blue')
# plt.title('Baseline BERTScore Precision Over Dataset')
# plt.xlabel('Sample Index')
# plt.ylabel('Precision Score')
# plt.legend()
# plt.savefig('precision_baseline.png') # Save the plot as an image
# plt.show()

# # Recall Plot
# plt.plot(R_scores_baseline, label='Recall', color='red')
# plt.title('Baseline BERTScore Recall Over Dataset')
# plt.xlabel('Sample Index')
# plt.ylabel('Recall Score')
# plt.legend()
# plt.savefig('recall_baseline.png') # Save the plot as an image
# plt.show()

```

```

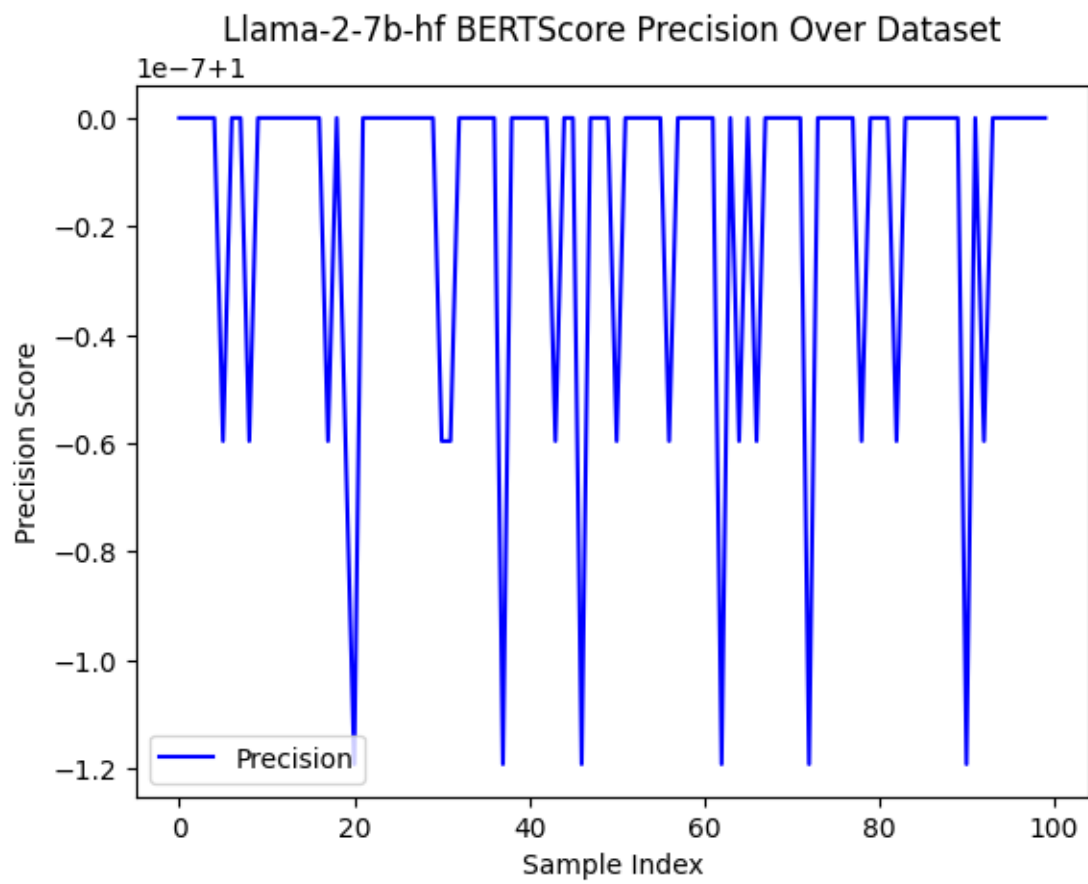
# # F1 Score Plot
# plt.plot(F1_scores_baseline, label='F1 Score', color='purple')
# plt.title('Baseline BERTScore F1 Score Over Dataset')
# plt.xlabel('Sample Index')
# plt.ylabel('F1 Score')
# plt.legend()
# plt.savefig('f1_score_baseline.png') # Save the plot as an image
# plt.show()

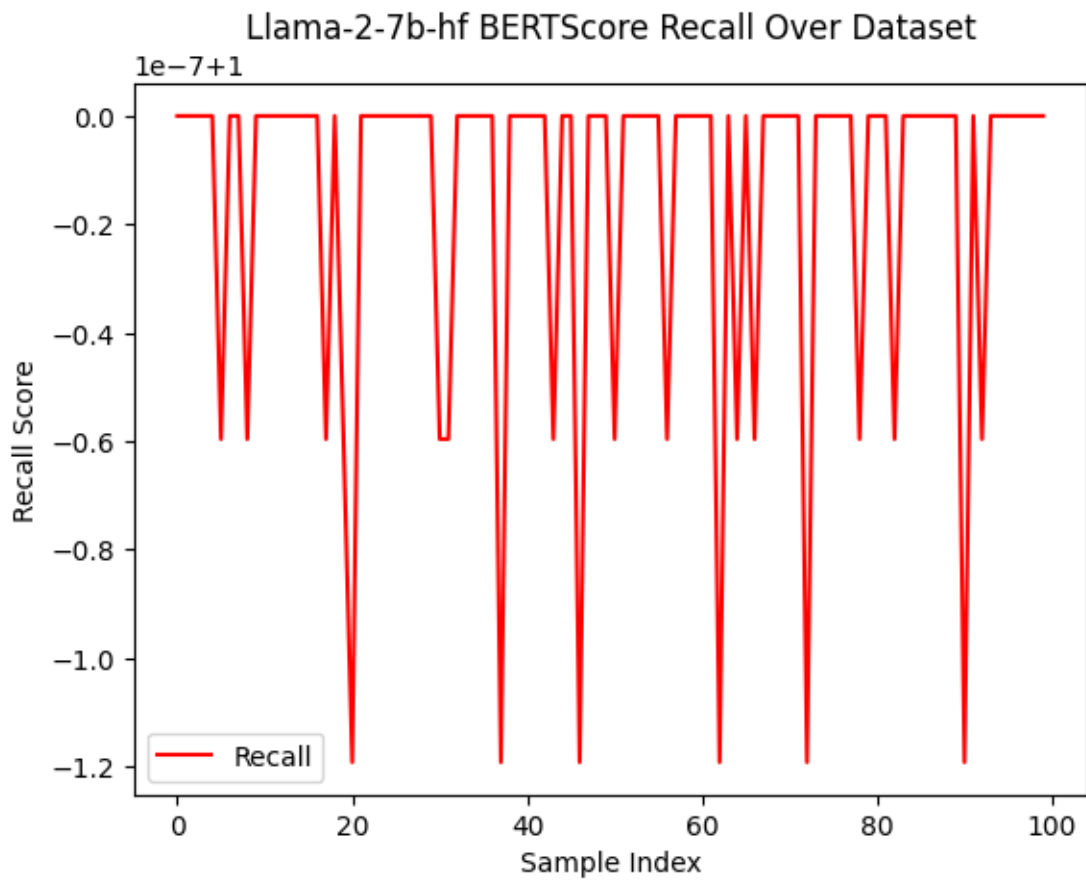
# Precision Plot
plt.plot(P_scores, label='Precision', color='blue')
plt.title('Llama-2-7b-hf BERTScore Precision Over Dataset')
plt.xlabel('Sample Index')
plt.ylabel('Precision Score')
plt.legend()
plt.savefig('precision_Llama-2-7b-hf.png') # Save the plot as an image
plt.show()

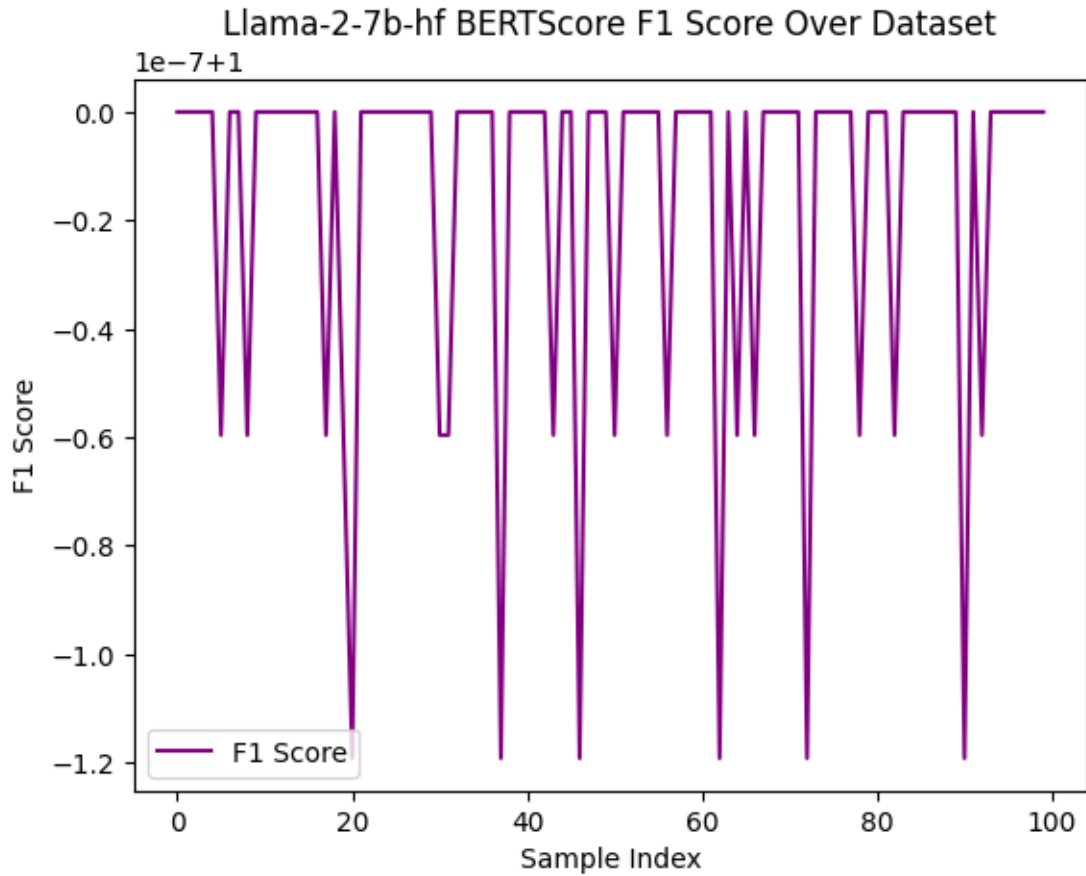
# Recall Plot
plt.plot(R_scores, label='Recall', color='red')
plt.title('Llama-2-7b-hf BERTScore Recall Over Dataset')
plt.xlabel('Sample Index')
plt.ylabel('Recall Score')
plt.legend()
plt.savefig('recall_Llama-2-7b-hf.png') # Save the plot as an image
plt.show()

# F1 Score Plot
plt.plot(F1_scores, label='F1 Score', color='purple')
plt.title('Llama-2-7b-hf BERTScore F1 Score Over Dataset')
plt.xlabel('Sample Index')
plt.ylabel('F1 Score')
plt.legend()
plt.savefig('f1_score_Llama-2-7b-hf.png') # Save the plot as an image
plt.show()

```







```
[ ]: from nltk.translate.bleu_score import sentence_bleu

def evaluate_bleu_with_pipeline(pipeline_model, test_dataset):
    bleu_scores = []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
            instruction, target = match.groups()
            generated_text = pipe(instruction)[0]['generated_text']
            reference = target.split()
            candidate = generated_text.split()
            score = sentence_bleu([reference], candidate)
            bleu_scores.append(score)
    return bleu_scores

def evaluate_bleu_on_outputs(outputs, targets):
    bleu_scores = []
    for output, target in zip(outputs, targets):
        reference = target.split()
```



```

        candidate = output.split()
        score = sentence_bleu([reference], candidate)
        bleu_scores.append(score)
    return bleu_scores

def evaluate_bleu_baseline(test_dataset):
    bleu_scores = []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
            instruction, target = match.groups()
            generated_text = instruction
            reference = target.split()
            candidate = generated_text.split()
            score = sentence_bleu([reference], candidate)
            bleu_scores.append(score)
    return bleu_scores

targets = [instruction_pattern.match(entry['formatted_text']).groups()[1] for
    ↪entry in test_dataset]
# bleu_scores = evaluate_bleu_with_pipeline(model, test_dataset)
bleu_scores_baseline = evaluate_bleu_baseline(test_dataset)
bleu_scores_outputs = evaluate_bleu_on_outputs(outputs, targets)

print(f'BLEU Score on outputs: {bleu_scores_outputs}')
print(f'BLEU Score on baseline: {bleu_scores_baseline}')

```

```

BLEU Score on outputs: [3.502305465495142e-156, 9.49461805783923e-156,
5.064275528751732e-156, 1.1500837733209774e-155, 7.327879477603374e-156,
1.3053993964452069e-80, 3.950696222189718e-163, 1.7636737157979897e-155,
2.7218702183335134e-155, 4.628564449833436e-79, 6.456120761777722e-79,
6.191629345140785e-156, 1.6330489471722819e-80, 1.9721835559864969e-156,
2.8859090867047656e-232, 1.086439903254273e-231, 1.640481293978328e-79,
3.3995438573665385e-80, 3.848234646078389e-79, 1.6545612698573653e-155,
7.216223573167128e-232, 0.014969812774849224, 9.334664416553698e-156,
1.011837957925046e-155, 1.360347659463268e-155, 1.3635648334481861e-155,
3.3130615687567903e-155, 6.282974797956499e-79, 5.072931210553578e-79,
1.3929636915559674e-155, 4.3305311764587934e-169, 1.4606323906249245e-155,
2.1590451573546346e-155, 8.8555589525957e-232, 2.5280115683764437e-156,
1.2530608891782372e-155, 6.006892298434198e-157, 6.35366916520592e-156,
1.3392226661306487e-05, 0.009611475439442912, 1.0913958678249956e-231,
1.6098537027468128e-155, 9.628451967518991e-161, 1.6516266862431629e-155,
4.445329380890106e-159, 9.213873702307531e-156, 1.4029793970268292e-79,
1.4874555658999602e-155, 1.886814944973659e-155, 6.103850362580335e-232,
5.235709073392948e-156, 4.034150740591202e-79, 3.4037646164673903e-155,
2.6203780287922186e-155, 1.3167898770674543e-156, 2.932461493240329e-155,
2.752833420379727e-155, 2.0960001475497262e-79, 2.0384849583775444e-155,

```

6.842376327815708e-186, 1.9433948139719804e-162, 2.7412374664641915e-157,
 3.2000673303055848e-155, 1.6703337144304364e-79, 2.5664069300143828e-79,
 1.026549714522115e-79, 2.760066332789006e-159, 3.7066984233396883e-155,
 9.43185378549794e-157, 3.516444314602275e-80, 1.329148684127402e-156,
 3.045535459855091e-79, 1.0009842547482224e-231, 0.00562856014692632,
 8.634903591814285e-80, 6.80969278337021e-80, 2.1473496899015639e-159,
 7.480339603390527e-232, 4.512269099000157e-82, 4.447749541819888e-156,
 1.619336062450649e-157, 1.6991587316882831e-156, 6.025284743655112e-156,
 3.1500311086385196e-155, 2.1243159720542707e-233, 1.0514326257454451e-156,
 5.401647199625609e-232, 4.262198384108961e-155, 2.295708545243182e-155,
 2.780062935574795e-79, 3.815934819987127e-232, 1.885794897165665e-155,
 2.342881209193834e-156, 5.1762587902065165e-155, 3.354906583155811e-155,
 2.858561853350532e-79, 1.5911152003715825e-156, 1.5307240833530604e-79,
 3.4944617741203746e-155, 7.932212604184418e-156]
 BLEU Score on baseline: [1.0503388679494635e-161, 9.62352534797236e-266,
 5.3489841409388596e-08, 1.0311449361647689e-248, 4.85336285745912e-168,
 9.435712213297146e-30, 3.991276323769975e-258, 2.2355240487458955e-213,
 2.150979829753661e-171, 3.133871614768873e-157, 3.7221130843493147e-165,
 1.1864886227465735e-160, 6.198293070364349e-174, 3.650030218685951e-240,
 5.989306571984278e-235, 1.3152732381948194e-159, 1.857143992811571e-86,
 2.7932407843775568e-191, 2.400439101265555e-177, 8.210089483610828e-169,
 4.767274921258687e-236, 8.514520338706963e-159, 1.521314481102897e-163,
 1.1588502833893887e-160, 1.0259575833961709e-81, 2.199145594757005e-31,
 4.5337948288916424e-158, 8.437761826354337e-158, 7.20784764238238e-158,
 2.17950568831917e-91, 2.6736e-318, 5.592091112284474e-258,
 1.8495906940881902e-87, 1.929122103502539e-237, 8.030501992397167e-174,
 3.153540927117002e-165, 0.0, 1.1110891077155354e-243, 6.287063142888409e-14,
 7.375675679487155e-164, 3.053178295475202e-256, 1.8061615568350622e-238,
 2.967621342815115e-170, 3.483673920487182e-249, 9.180896348723206e-190,
 3.36982479596464e-90, 2.3864123842411361e-175, 1.850181168897625e-164,
 6.206016873807203e-159, 4.0010704912659294e-173, 2.3108268397299543e-169,
 3.2732201127682573e-161, 2.6927448569060403e-234, 1.4493663204114914e-242,
 3.273832838391769e-17, 1.0690908102369871e-156, 7.447111179270216e-237,
 1.516497504477757e-177, 9.238674423569978e-83, 4.3444234112177413e-128,
 4.256305039267569e-138, 2.089820393159063e-285, 1.0046692854268323e-08,
 1.5436096014200157e-181, 5.901567107637098e-09, 1.1876751934056178e-268,
 1.0006204776014627e-162, 4.2326393298301505e-156, 7.88660252091679e-168,
 3.1058615827453492e-177, 6.975179794291259e-88, 4.702656702216939e-161,
 1.5584809110654993e-237, 2.551264456483e-84, 6.0288149282755637e-92,
 9.23816117330675e-213, 8.418959106983042e-241, 7.52294260513737e-161,
 1.0896839223118157e-236, 1.646293650876965e-06, 8.693752144912022e-167,
 2.646009585458704e-17, 2.3134102550829644e-159, 1.6894994243018212e-236,
 8.108504059289428e-85, 1.2737551182314772e-26, 9.35998201104642e-165,
 6.936009254462449e-240, 1.442128007655238e-163, 1.3755387680993565e-90,
 1.1121802602381276e-268, 1.4787400786009976e-165, 8.8880327910301e-169,
 6.125968833857642e-239, 1.8861290902395797e-236, 1.5378566465145287e-24,
 1.965968599209743e-236, 8.362439273506421e-29, 1.695912691287693e-234,
 6.806537537589434e-84]

```

/usr/local/lib/python3.10/dist-packages/nltk/translate/bleu_score.py:552:
UserWarning:
The hypothesis contains 0 counts of 3-gram overlaps.
Therefore the BLEU score evaluates to 0, independently of
how many N-gram overlaps of lower order it contains.
Consider using lower n-gram order or use SmoothingFunction()
  warnings.warn(_msg)
/usr/local/lib/python3.10/dist-packages/nltk/translate/bleu_score.py:552:
UserWarning:
The hypothesis contains 0 counts of 4-gram overlaps.
Therefore the BLEU score evaluates to 0, independently of
how many N-gram overlaps of lower order it contains.
Consider using lower n-gram order or use SmoothingFunction()
  warnings.warn(_msg)
/usr/local/lib/python3.10/dist-packages/nltk/translate/bleu_score.py:552:
UserWarning:
The hypothesis contains 0 counts of 2-gram overlaps.
Therefore the BLEU score evaluates to 0, independently of
how many N-gram overlaps of lower order it contains.
Consider using lower n-gram order or use SmoothingFunction()
  warnings.warn(_msg)

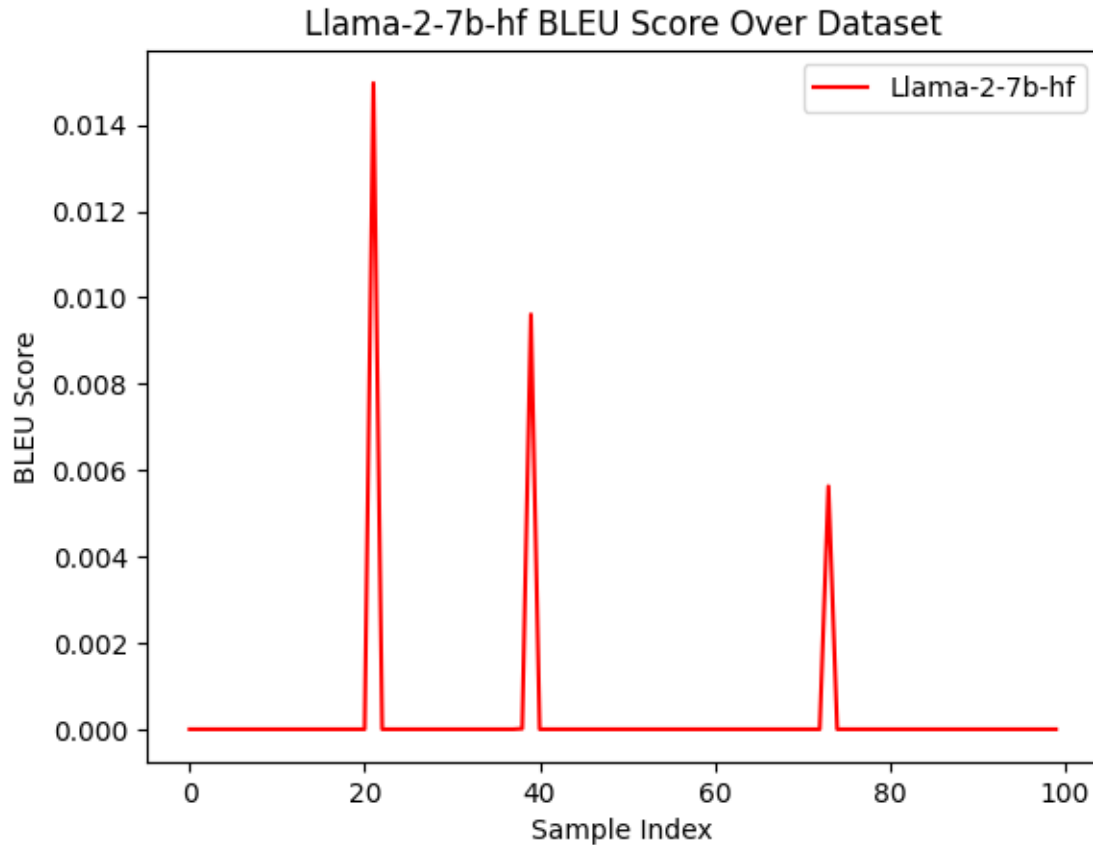
```

```

[30]: # # BLEU Plots
# plt.plot(bleu_scores_baseline, label='Baseline', color='blue')
# plt.title('Baseline BLEU Score Over Dataset')
# plt.xlabel('Sample Index')
# plt.ylabel('BLEU Score')
# plt.legend()
# plt.savefig('bleu_score.png')
# plt.show()

plt.plot(bleu_scores_outputs, label='Llama-2-7b-hf', color='red')
plt.title('Llama-2-7b-hf BLEU Score Over Dataset')
plt.xlabel('Sample Index')
plt.ylabel('BLEU Score')
plt.legend()
plt.savefig('bleu_score_Llama-2-7b-hf.png')
plt.show()

```



```
[ ]: !pip install rouge
```

Collecting rouge

Downloading rouge-1.0.1-py3-none-any.whl (13 kB)

Requirement already satisfied: six in /usr/local/lib/python3.10/dist-packages (from rouge) (1.16.0)

Installing collected packages: rouge

Successfully installed rouge-1.0.1

```
[ ]: from rouge import Rouge
```

```
def evaluate_rouge_with_pipeline(pipeline_model, test_dataset):  
    rouge = Rouge()  
    rouge_scores = []  
    for entry in test_dataset:  
        match = instruction_pattern.match(entry['column_name'])  
        if match:  
            instruction, target = match.groups()  
            generated_text = pipe(instruction)[0]['generated_text']  
            scores = rouge.get_scores(generated_text, target)
```

```

        rouge_scores.append(scores)
    return rouge_scores

def evaluate_rouge_on_outputs(outputs, targets):
    rouge = Rouge()
    rouge_scores = []
    for output, target in zip(outputs, targets):
        scores = rouge.get_scores(output, target)
        rouge_scores.append(scores)
    return rouge_scores

def evaluate_rouge_baseline(test_dataset):
    rouge = Rouge()
    rouge_scores = []
    for entry in test_dataset:
        match = instruction_pattern.match(entry['formatted_text'])
        if match:
            instruction, target = match.groups()
            generated_text = instruction
            scores = rouge.get_scores(generated_text, target)
            rouge_scores.append(scores)
    return rouge_scores

# rouge_scores = evaluate_rouge_with_pipeline(model, test_dataset)
rouge_scores_baseline = evaluate_rouge_baseline(test_dataset)
rouge_scores_outputs = evaluate_rouge_on_outputs(outputs, targets)

print(f'ROUGE Score on outputs: {rouge_scores_outputs}')
print(f'ROUGE Score on baseline: {rouge_scores_baseline}')

```

```

ROUGE Score on outputs: [[{'rouge-1': {'r': 0.15210355987055016, 'p':
0.2554347826086957, 'f': 0.1906693665181919}, 'rouge-2': {'r':
0.001841620626151013, 'p': 0.004975124378109453, 'f': 0.002688168099533187},
'rouge-l': {'r': 0.13268608414239483, 'p': 0.22282608695652173, 'f':
0.1663285957271169}}], [{'rouge-1': {'r': 0.19291338582677164, 'p':
0.22685185185185186, 'f': 0.20851063333055694}, 'rouge-2': {'r':
0.006276150627615063, 'p': 0.012605042016806723, 'f': 0.008379883829938994},
'rouge-l': {'r': 0.16535433070866143, 'p': 0.19444444444444445, 'f':
0.17872339928800376}}], [{'rouge-1': {'r': 0.14285714285714285, 'p':
0.1901840490797546, 'f': 0.1631578898378118}, 'rouge-2': {'r':
0.002564102564102564, 'p': 0.005434782608695652, 'f': 0.003484316201489014},
'rouge-l': {'r': 0.12442396313364056, 'p': 0.1656441717791411, 'f':
0.14210525825886444}}], [{'rouge-1': {'r': 0.205607476635514, 'p':
0.27848101265822783, 'f': 0.23655913489825423}, 'rouge-2': {'r':
0.004651162790697674, 'p': 0.011764705882352941, 'f': 0.0066666626055580285},
'rouge-l': {'r': 0.18691588785046728, 'p': 0.25316455696202533, 'f':
0.21505375855416822}}], [{'rouge-1': {'r': 0.21182266009852216, 'p':

```

0.3644067796610169, 'f': 0.2679127679362584}, 'rouge-2': {'r':
 0.011376564277588168, 'p': 0.03472222222222224, 'f': 0.017137956865031657},
 'rouge-1': {'r': 0.19950738916256158, 'p': 0.3432203389830508, 'f':
 0.2523364439487195}}], [{'rouge-1': {'r': 0.0975609756097561, 'p':
 0.30303030303030304, 'f': 0.1476014723301699}, 'rouge-2': {'r':
 0.013774104683195593, 'p': 0.0625, 'f': 0.022573360471646105}, 'rouge-1': {'r':
 0.08292682926829269, 'p': 0.25757575757575757, 'f': 0.1254612509279559}}],
 [{'rouge-1': {'r': 0.03642384105960265, 'p': 0.2894736842105263, 'f':
 0.0647058803674741}, 'rouge-2': {'r': 0.0034542314335060447, 'p': 0.05, 'f':
 0.0064620343323044}, 'rouge-1': {'r': 0.033112582781456956, 'p':
 0.2631578947368421, 'f': 0.05882352742629765}}], [{'rouge-1': {'r':
 0.2591093117408907, 'p': 0.17391304347826086, 'f': 0.20813007649436194},
 'rouge-2': {'r': 0.004484304932735426, 'p': 0.005076142131979695, 'f':
 0.004761899781070969}, 'rouge-1': {'r': 0.22672064777327935, 'p':
 0.15217391304347827, 'f': 0.18211381633176033}}], [{'rouge-1': {'r':
 0.4049079754601227, 'p': 0.1575178997613365, 'f': 0.22680411967873548},
 'rouge-2': {'r': 0.010135135135135136, 'p': 0.006622516556291391, 'f':
 0.008010676127567687}, 'rouge-1': {'r': 0.3496932515337423, 'p':
 0.1360381861575179, 'f': 0.19587628462718917}}], [{'rouge-1': {'r':
 0.3614457831325301, 'p': 0.08287292817679558, 'f': 0.134831457639591},
 'rouge-2': {'r': 0.01652892561983471, 'p': 0.004761904761904762, 'f':
 0.007393711869238104}, 'rouge-1': {'r': 0.3373493975903614, 'p':
 0.07734806629834254, 'f': 0.1258426935946472}}], [{'rouge-1': {'r':
 0.37244897959183676, 'p': 0.17548076923076922, 'f': 0.23856208714938704},
 'rouge-2': {'r': 0.024390243902439025, 'p': 0.017391304347826087, 'f':
 0.02030456366822245}, 'rouge-1': {'r': 0.3520408163265306, 'p':
 0.1658653846153846, 'f': 0.22549019172455045}}], [{'rouge-1': {'r':
 0.17177914110429449, 'p': 0.22950819672131148, 'f': 0.19649122317365356},
 'rouge-2': {'r': 0.0036231884057971015, 'p': 0.0078125, 'f':
 0.004950490720521381}, 'rouge-1': {'r': 0.13496932515337423, 'p':
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 0.14862914862914864, 'p': 0.42213114754098363, 'f': 0.2198505831278326},
 'rouge-2': {'r': 0.005952380952380952, 'p': 0.03146853146853147, 'f':
 0.010011120795248431}, 'rouge-1': {'r': 0.1443001443001443, 'p':
 0.4098360655737705, 'f': 0.21344716797308338}}], [{'rouge-1': {'r':
 0.2079646017699115, 'p': 0.38524590163934425, 'f': 0.270114937975294},
 'rouge-2': {'r': 0.0024449877750611247, 'p': 0.0078125, 'f':
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 0.28688524590163933, 'f': 0.20114942073391473}}], [{'rouge-1': {'r':
 0.14285714285714285, 'p': 0.1095890410958904, 'f': 0.1240310028387719},
 'rouge-2': {'r': 0.0, 'p': 0.0, 'f': 0.0}, 'rouge-1': {'r': 0.11607142857142858,
 'p': 0.08904109589041095, 'f': 0.10077518888528357}}], [{'rouge-1': {'r':
 0.30612244897959184, 'p': 0.1171875, 'f': 0.16949152141977092}, 'rouge-2': {'r':
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 'f': 0.14689265136327376}}], [{'rouge-1': {'r': 0.12847222222222222, 'p':
 0.4457831325301205, 'f': 0.1994609129686649}, 'rouge-2': {'r':
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 'rouge-1': {'r': 0.12152777777777778, 'p': 0.42168674698795183, 'f':

0.18867924180963527}}], [{'rouge-1': {'r': 0.20155038759689922, 'p':
 0.4431818181818182, 'f': 0.27708702945007246}, 'rouge-2': {'r':
 0.014354066985645933, 'p': 0.0547945205479452, 'f': 0.02274881187603201},
 'rouge-l': {'r': 0.17571059431524547, 'p': 0.38636363636363635, 'f':
 0.24156305076445964}}], [{'rouge-1': {'r': 0.31044776119402984, 'p':
 0.2659846547314578, 'f': 0.28650137244021745}, 'rouge-2': {'r':
 0.012968299711815562, 'p': 0.021176470588235293, 'f': 0.016085786173664348},
 'rouge-l': {'r': 0.27761194029850744, 'p': 0.23785166240409208, 'f':
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 0.008385744234800839, 'p': 0.024691358024691357, 'f': 0.012519558030374307},
 'rouge-l': {'r': 0.14814814814814814, 'p': 0.27972027972027974, 'f':
 0.19370459595706147}}], [{'rouge-1': {'r': 0.07228915662650602, 'p':
 0.05309734513274336, 'f': 0.06122448491305746}, 'rouge-2': {'r': 0.0, 'p': 0.0,
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```

```
[31]: import matplotlib.pyplot as plt
```

```

# # Extract F1-scores for each ROUGE metric
# rouge_1_f1_baseline = [score[0]['rouge-1']['f'] for score in
↪rouge_scores_baseline]

```

```

# rouge_2_f1_baseline = [score[0]['rouge-2']['f'] for score in
    ↪rouge_scores_baseline]
# rouge_l_f1_baseline = [score[0]['rouge-l']['f'] for score in
    ↪rouge_scores_baseline]

# # Plotting
# plt.figure(figsize=(12, 6))
# plt.plot(rouge_1_f1_baseline, label='ROUGE-1 F1', color='blue')
# plt.plot(rouge_2_f1_baseline, label='ROUGE-2 F1', color='red')
# plt.plot(rouge_l_f1_baseline, label='ROUGE-L F1', color='green')

# plt.title('Baseline ROUGE Scores Over Dataset')
# plt.xlabel('Sample Index')
# plt.ylabel('F1 Score')
# plt.legend()
# plt.savefig('rouge_score_baseline.png')
# plt.show()

rouge_1_f1_outputs = [score[0]['rouge-1']['f'] for score in
    ↪rouge_scores_outputs]
rouge_2_f1_outputs = [score[0]['rouge-2']['f'] for score in
    ↪rouge_scores_outputs]
rouge_l_f1_outputs = [score[0]['rouge-l']['f'] for score in
    ↪rouge_scores_outputs]

# Plotting
plt.figure(figsize=(12, 6))
plt.plot(rouge_1_f1_outputs, label='ROUGE-1 F1', color='blue')
plt.plot(rouge_2_f1_outputs, label='ROUGE-2 F1', color='red')
plt.plot(rouge_l_f1_outputs, label='ROUGE-L F1', color='green')

plt.title('Llama-2-7b-hf ROUGE Scores Over Dataset')
plt.xlabel('Sample Index')
plt.ylabel('F1 Score')
plt.legend()
plt.savefig('rouge_score_Llama-2-7b-hf.png')
plt.show()

```

