

Task 2 Report

Changing the parameters

I changed the max_length, temperature and top_ks to values of [20,50,100], [0.5,1, 1.50] and [10,50,100], for each parameter respectively. This was carried out by using 3 loops to try out every combination, to find out which combo was most effective in generating prompts.

Which settings produced the best result?

The parameter combination with the best result was when temperature=1 and top_k=50, whilst max_length didn't really impact what was generated. Whilst I only tested 3 different values for each parameter, its clear that finding the right values within a certain range of the given values, would produce even better results.

How long did the generation take?

Since 3 inner loops were used just for the parameter testing, plus 1 loop for each prompt, the execution time for this was $O(n^4)$, making this a very slow program. By using the max performance settings on my own device, the maximum amount of time taken for a prompt to generate was nearly 2 seconds, whilst the average time was around 0.6 seconds.