Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Human: The text is some concatenation of words from a list.

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Human: The text is some concatenation of words from a list.

LLM: The text is randomly generated.

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Human: The text is some concatenation of words from a list.

LLM: The text is randomly generated.

DP Solution: The text is human-made if the first 6, 7, 8, 9, or 10 letters occur in the word list, and the remainder of the text is also human-made, recursively.

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Human: The text is some concatenation of words from a list.

LLM: The text is randomly generated.

DP Solution: The text is human-made if the first 6, 7, 8, 9, or 10 letters occur in the word list, and the remainder of the text is also human-made, recursively.

Better: Only check if any word is a prefix: fails with probability at most $5000/26^6 < 0.002\%$

per case.

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Observation: In a random text, nearly all length-6 substrings (6-mers) are different, since

 $26^6 \approx 300~000~000 \gg 300~000.$

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Observation: In a random text, nearly all length-6 substrings (6-mers) are different, since

 $26^6 \approx 300\ 000\ 000 \gg 300\ 000$.

Solution: The text is LLM-generated if all 6-mers occur at most twice, and human otherwise.

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Observation: In a random text, nearly all length-6 substrings (6-mers) are different, since

 $26^6 \approx 300\ 000\ 000 \gg 300\ 000$.

Solution: The text is LLM-generated if all 6-mers occur at most twice, and human otherwise.

Alternative: Count the number of distinct 6-mers instead.

Problem author: Jeroen Op de Beek



Problem: Determine whether a text is human-made or LLM-generated.

Observation: In a random text, nearly all length-6 substrings (6-mers) are different, since

 $26^6 \approx 300\ 000\ 000 \gg 300\ 000$.

Solution: The text is LLM-generated if all 6-mers occur at most twice, and human otherwise.

Alternative: Count the number of distinct 6-mers instead.

Statistics: 146 submissions, 39 accepted, 49 unknown