My sentiments regarding the utilization of Artificial Intelligence in Capture The Flag competitions.

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I’ve recently observed discourse on the utilization of AI in CTF challenges. The predominant sentiment suggests that AI’s integration is inevitable and judicious application thereof constitutes an astute problem-solving methodology.

I, too, employ AI in deciphering CTF challenges, though its application varies with the complexity of the puzzle. For elementary problems, AI offers limited utility; sifting through GitHub for pertinent repositories or adapting pre-existing code proves more expedient and fruitful. Indeed, most facile challenges succumb to such methods. Particularly in instances demanding a degree of guesswork, AI may prove more of a hindrance than a help.

Now, concerning challenges of significant complexity, perhaps those venturing into uncharted territories or demanding intricate cogitation, it is in such instances that the AI’s assistance proves unequivocally invaluable.

In my methodology, when faced with a complex quandary, I initially employ AI to meticulously categorize the pivotal keywords of the problem. This elucidates the path I must traverse. Instances such as misidentifying a challenge as solely an RSA problem, when Oracle nuances were paramount, highlight the fallibility of individual discernment. Thus, AI serves as an invaluable guide, illuminating the proper course.

Subsequent to the precise articulation of keywords for problem-solving, I subject my conceived theories to AI for validation, effectively employing it as a mentor. Consider the scenario where I’ve located a research paper; I query the AI: “Would comprehending this paper facilitate problem resolution?” The AI will affirm or deny. Similarly, I might inquire, “Is the application of this technique appropriate for resolving this issue?” Again, the AI will provide an affirmative or negative response. I strongly prefer AI’s responses to be confined strictly to binary affirmations or negations in its utility.

The aforementioned explanation arises from my profound aversion to the encroachment of AI’s inherent assumptions during problem-solving.

What, then, are the objections of those who frown upon the utilization of AI in CTFs? While reasons may be various, the principal concern likely stems from outsourcing the entire problem-solving process to AI merely to obtain the correct answer, thereby forgoing the invaluable knowledge and experience gained through genuine engagement.

Might this method be considered unfavorable? It is far too significant a matter to establish a definitive conclusion based solely on my personal viewpoint. However, expressing my individual sentiment, such a method may demonstrate a lack of respect towards the problem's author. If one can simply solve the problem in any manner and derive satisfaction, then so be it. Who could criticize that? Yet, evaluating the problem's difficulty or entertainment value without even comprehending it seems truly unjustifiable. While I wholeheartedly concur that refraining from AI usage amid its advancement is an admirable stance, ethical considerations extending beyond AI remain a task for us. Security ethics are of utmost importance, and I, too, find them captivating.

In essence, the denouement of this discourse posits thus: Employing AI as a problem-solving instrument is not inherently reprehensible. However, it is indeed, a breach of the ethical code for one who has leveraged AI in their problem-solving, to then evaluate said problem. However, adherence to the precepts of any designated CTF Competition is, indubitably, of paramount exigency.