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### Program 3

Artificial intelligence has been all over the news lately for its impacts in what feels like every field. My question has been how useful is AI as a tool? Has it advanced enough to be legitimately helpful? I've seen the AI policies being put into place in every class on my college campus but I've never actually seen what these tools can do. I'm going to compare my work against that of an AI on a relatively simple coding project. I'll be using ChatGPT as my AI and I will be focusing on quality, time, and style

The AI produced functional code that matches the specifications of the project. I can't seem to find any bugs in the AI's code so the quality of the code is solid. I couldn't get the AI to put comments on all of the methods. It would start and then not comment on or not include other classes. This was really annoying to work with as the AI would swap from not including comments to not including classes with each prompt. I made a few mistakes with my code including an inconsistent style and a random player that wasn't very random. I also had not included a WimpPlayer in my final product. I made these mistakes but I am able to understand what those mistakes are and how to fix them. The AI struggles to do this with further prompting.

The AI was much faster than me coding it myself. It got most of the way there on its first try. When I started trying to have it change the code it started to take a little longer. Most of my time was spent trying to coax the AI towards the result I wanted while when I did my project all of my time was spent coding. I found that the time I spend editing is much less than the time I spent trying to get the AI to edit.

I asked the AI to match the style of the class that I had provided but it didn't maintain the same comment structure on all of the classes and methods. Trying to get it into a specific style was also difficult as when I had it try to change the code it would sometimes break it or not change it in the way I had in mind. This made it hard to get a specific style from the AI. I didn't have a fantastic style of comments on this project but they were all present and I have the ability to quickly make changes to the code I've produced to fit standards.

I found working with the AI to be very fast but that it was difficult to make small changes to the code with the AI. On the contrary I took much longer to code the project but I will be able to make the necessary edits much more easily and more precisely than the AI can. This is what could make AI such a great tool. It would do a lot of the grunt work required for projects like this and I, a human, could go and fix the few things that need to be fixed and add the few things that need to be added.