

Each of the following questions is worth 2 points. As the University at Buffalo is in the US, your answers need to reflect American intellectual property laws. Answer all parts of the following questions. **You must work on this on your own. You cannot use large language models (e.g., ChatGPT) or translation software when answering these questions.**

1. What DNA *can* be patented?  
What DNA *cannot* be patented?  
What differentiates the two situations?
2. What parts of a database *can* be copyrighted?  
What parts of a database *cannot* be copyrighted?  
What differentiates the parts of a database than can and cannot be copyrighted?
3. Would rewriting code so that it uses different variable names, function names, and comments be enough to avoid infringing on a copyright?  
Would rewriting code so that it uses different variable names, function names, and comments be enough to avoid infringing on a patent?  
Explain your reasoning based on the protections provided by copyrights and patents.
4. An API consists of file names, function names, and specific work performed by each function. Would duplicating another company's API, but writing entirely new code within the functions, violate their copyright? Explain your reasoning.
5. Another company has an (undocumented) API available online but you were able to figure how the API works. Would writing entire new code that use that other company's API violate their trade secret protection? Explain your reasoning.