Programming Exercise 4  
  
A screenshot of a computer

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Advantages of using \*\*kwargs:

1. Flexibility: Functions accept any number of keyword arguments, adapting to varying input without modifying the signature.
2. Extensibility: Adding new parameters to a function call doesn’t alter the definition.
3. Readability: \*\*kwargs makes function calls cleaner and more readable for large numbers of optional parameters.

Disadvantages of using \*\*kwargs:

1. Limited type checking: \*\*kwargs bypasses static type checking, increasing the risk of runtime errors for functions expecting specific types.
2. Debugging difficulties: Tracing errors can be harder when arguments are passed dynamically through \*\*kwargs, especially in large codebases.
3. Overuse: \*\*kwargs reduces code clarity if the number and type of arguments are known beforehand. Explicitly defining arguments in the function signature is often better.