If I want to use the function printInformation in other source file, I should write a declaration of the function in the header file. So that when the header file is included in another place, the function will be declared and I am able to use it. When compiling the code, the compiler will know that the function is already declared and is valid, so it will not throw an error.

If the function is accidentally declared and defined in the header file, it will almost always result in an error when trying to build the program. I am not sure the exact situation when it will be harmless as it is outside the current knowledge covered by this class. The error will be during the linking process of building the program. Because the function is only defined once in each individual files so they can be successfully compiled, but when linking the files together as one program, the linker will see that the same function is defined more than one time and result in an error.