CS-231 PROGRAMMING LANGUAGE DESIGN STUDENT RECORDS USING ALGORITHMS IN STL

In this program, you will write a C++ program for the following task. You will process a file which contain employee names, education level and salaries. Name will be two word string with first name and last name, education level will be "High_School", "Bachelors", "Masters", "Doctorate". Salaries will be a "$" sign followed by an integer. Each line will contain these with "," (comma) as a separator. For example,

John Smith,Masters,$60000
Jackie Collins,Doctorate,$80000
Will Smith,Masters,$100000

Create a list of records (structs) each containing an employee data.

1. Read a list of student records from a file and load it into a `vector` type in C++
2. Sort the vector by increasing education, using `sort` algorithm in C++. (Doctorate > Masters> Bachelors> Highschooler)
3. Students that have the same education, sort by increasing salary, using algorithms in STL.
4. Print the count of students with each education level using algorithms in STL
5. Increase the salary by 10% whose education level is low, 20% for those with education level medium and 30% for those with education level high. Use algorithms in STL
6. Print the modified vector.

NO LOOPS CAN BE USED IN THIS ASSIGNMENT EXCEPT FOR STEPS 1 and 6. (If you must use a loop, it will cost you 20 points off per loop. Loops include range based loops, for loops, do loops and do-while loops.

You can use any iterators, classes and algorithms form STL. `count-if, find-if, sort, transform` are all algorithms that might be helpful for this assignment

Extra Credit: If you use no loops at all!