

Week 13:

Learning Materials: STL

Task 1:

For this task, your objective is to work with a vector representing **student scores**. Initiate an empty vector named "**scores**" and dynamically add 5 student scores. Implement various operations on this vector using standard C++ algorithms and functions. Functions include-

1. Finding the first score greater than 90,
2. Counting the number of students who scored exactly 88,
3. Checking if another vector named "**scores2**" is equal to the original "scores" vector,
4. Searching for a sequence {80, 92} in the vector,
5. Creating a copy of the vector,
6. Swapping the first and last score,
7. Sorting the vector in ascending order,
8. Merging the **scores** and **scores2** vectors,
9. Calculating the average score using accumulate,
10. Updating each score by 10%,
11. Transforming the scores to percentage grades.

Make use of appropriate C++ standard library functions. Ensure to print the intermediate and final results to verify the correctness of each operation.

