**Programming Exam 3 Example: STL**

Implement a **non-member** function named **function1** as follows:

- o **Parameters:**
    - An STL map of characters and integers
    - An STL set initially empty
    - An STL vector initially empty
- o The function inserts in reversed order the integers stored in the map into the set. Once the set is populated, the function inserts the elements from the set into the vector, rotates the vector so that the third element become the first (use function **rotate**), and finally prints the vector.
- o **Example:**

    **Map:** (J, 5) (B, 2) (S, 1) (L, 4) (H, 3)
    **Set:** (empty)
    **Vector:** (empty)

    ⇨ **Resulting map (unchanged):** (J, 5) (B, 2) (S, 1) (L, 4) (H, 3)
    ⇨ **Resulting set:** 1 2 3 4 5
    ⇨ **Resulting vector:** 3 4 5 1 2

You should create additional testing cases for a one-pair map and two-pair map.