

The design of practical 5

Class ID_list
<pre> +void set_official_id(); +void set_moodle_id(); +void set_official_list(); +void set_moodle_list(); +void set_official_list_int(); +void set_moodle_list_int(); +void set_sort_output(); </pre>
<pre> int times=0; vector<string> official_id; vector<string> moodle_id; vector<string> official_list; vector<string> moodle_list; vector<int> official_list_int; vector<int> moodle_list_int; </pre>

1. We need to use ifstream to read the two files. Then create a 2 vectors.
2. We need to get all the id number of each files, so we can use getline to get each line as an element of our vector, then use if loop to get the ID. And take all ID into another vector.
3. Then we need to compare the 2 new id vector, if the ID only exist in one file then we take them into another two vectors. One for the ID only exist in official file. One for ID only exist in moodle file.
4. Then we get the two vector which the ID is unique in each file. Then we need to sort them and print out. So we need to take all the string type ID into int type, the reason is easier for us to sort and print out. We can use stringstream function and we get 2 new vector. The element is same with the vector we get in 3rd step. But the type is changed to int not string.
5. We sort the 2 vector, we can use for loop and a template value replace the element in the vector.
6. Then print out "a" in the front of the number printed.

Test:

Output	expect
a1000003, a1000005 a1000002	a1000003, a1000005 a1000002