



Very important notice

Any project with syntax errors will not be checked

Some notions

In a database context a table is actually a table. Let be the following table *students*:

ID	Name	level
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We say that the table called *students* has three fields (columns):

1. **ID** of type int
2. **Name** of type string
3. **Level** of type int

We can populate the table *students* with some records (rows) as follows:

ID	Name	level
52700011	Monif Sami Al-Harbi	3
5140012	Yasir Saeed Al-Gahtani	2

We should also be able to find out a record (row) that fits a given field value. For example looking for the student that has *ID=52700011* returns:

ID	Name	level
52700011	Monif Sami Al-Harbi	3

We would like to implement a tiny database management system in which we can create tables, then find out records.

1. Write a C++ program `CREATE.cpp` that provides the user with capability to create a table with desired fields of desired types.
2. Write a C++ program `INSERT.cpp` which allows insertion into a table
3. Write a C++ program `SELECT.cpp` that allows seeking rows as described above.

Advices

Files: Think to use files for each table (ex. *students.tab*)

Classes: Think to write a class *table* with dynamic allocation

Table fields: Each access to the table should know number and types of the table fields. That means you should get this information from a header in the table's file before insertion and search.

Types: A string may represent any value of any type. Think then to use text files.

PS.

1. Your programs should be able to deal with different types and tables sizes

2. You can work together in groups of at most two students
3. Identical codes of two groups means 00 for all members of both
4. Your code should be commented
5. Each group should return the code in a CD
6. Be aware that your code will be compiled and tested using g++
7. As much you manage efforts as much you learn