Bash Project

Write a bash project that simulate the MySQL database and do the following:

The Project will be under Directory Called *MySQL*

There will be a main script called MySQL/`main.sh`

When A user run it the screen will be cleared and ask for the below entry and need to be selected by it's number Each one will run a specific script.

1) Create Database user.
2) Delete Database User.
3) Create new Database.
4) Delete an existing Database.
5) Create A new Table inside Database
6) Insert A New Row in a Table
7) Select Data from Table

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1) Create Database user
- By default, will be a system user called "oracle"
  (To test create a user by `useradd oracle`)
- If the user that run the script is "`oracle`" *or* <u>an admin user</u> then he can do the following:
  . Will Ask you for a new admin user.
  . If this user already exists MSG will appear that tells the user is already exist
  . If not, the entered user will be in a file called **DB_admins.db**
  . **DB_admins.db** will have a list of admin users, including oracle and other created users

2) Delete Database User
- Only users in **DB_admins.db** can run this script.
- The Script will show you the list of users in **DB_admins.db**
- If one is selected then it will be deleted from DB_admins.db
  o HINT) using sed command
- user "oracle" can't be deleted.

3) Create new Database
- Only users in **DB_admins.db** can run this script.
- The script will ask you for database name
- Then A Directory is created with the entered DB name under the Following Path:
  MySQL/DataBases/YOUR_NEW_DB
- A file will be in this path called owner.txt will have the user name <u>for the user that create this database.</u>
- **The final output for this script is A directory with DataBase Name**
  For example) `MySQL/DataBases/EmplyeeDB`

4) Delete an existing Database
- Only users in **DB_admins.db** can run this script.
- The script will show all available created Databases inside `MySQL/DataBases`
- If the Database owner is the same with the user that run this script, then Database **directory** and it's content be deleted.
- **example) if `EmplyeeDB` is selected directory and it's content be deleted.**

5) Create A new Table inside Database
- Only users in **DB_admins.db** can run this script
- The script will show all available created Databases inside `MySQL/DataBases`.
- If the Database owner is the same with the user that run this script,
  then will ask you for Table Name, Number of columns need to be created.
- If Table Name not already exist inside this Database then will ask you to enter the Column Names according to the entered number of columns.
- **The final output for this script must create a file named with the entered Table Name for example,** `MySQL/DataBases/EmplyeeDB/employee.table`**:**
  `#cat employee.table`
   `emp_id,emp_name,job_name,manager_id,hire_date`
- Each Column name is separated by comma.

6) Insert A New Row in a Table
- Only users in **DB_admins.db** can run this script
- The script will show all available created Databases inside `MySQL/DataBases` to select your working database.
- If the selected Database owner is the same with the user that run this script, then will show all available tables inside this database to select from it.
- **For the selected Table The script will start reading the table header then will ask you to enter these data.**
- **First column must be always unique**

   BOUNS(Optional) Read CSV file and read auto insert the matching header inside your table

7) Select Data from Table
- The script will show all available created Databases inside `MySQL/DataBases` to select your working database
- then will show all available tables inside this database to select from it.
- Now you will have two options:
  - Show The content of the selected table will be shown by cat this table name
    ```
    #cat employee.table
    emp_id,emp_name,job_name,hire_year
    1,Mohamed,unix admin,2021
    2,Ahmed,unix admin,2016
    3,Ahmed,DBA,2019
    ```

  - Search inside table take a string then show you the rows that have this string.

BOUNS)

8) Delete Row from Table
- From the selected table each row the contain a specific string must be deleted
- Then show you the updated table

Project will by group each group has two members.

Also, you can work individually if you want too

Good luck 😊