**EXECUTION :**

1. Importing mysql.connector module. Which provides connectivity to MYSQL server.
2. mysql.connector.connect(host='localhost', user='root',password='1234').This statement is used create a connection to the MYSQL and returns a MYSQLConnection Object.
3. Creating a cursor() object , which we use to execute SQL statements.
4. execute() is used to compile the SQL Statements.
5. Show\_tables() function can be used to display all the tables present in Assignment2 database.
6. Display\_tables() function :

This function displays the list of tables present in Assignment2 database. And asks for user his input (i.e., choose tables for given table list). Based on table name it will display the contents present in it.

1. Insert\_records() function :

This function helps user to insert data for instructor table. It will ask user to enter required details , Based on the user input code will insert the data into instructor table. Post successful insertion, All the records present in instructor table will be displayed.

1. Instructor\_details() function :

This function will display the details of instructor. Here 3 usecases are considered. Once user provides the Instructor ID , All the subjects taught by the professor will be displayed. Second usecase :- for semester=fall and year=2022, the subjects taught by the professor will be displayed if no subjects taught it will display “ Currently there were no classes taught by professor “. Third usecase :- Instructor classes for all fall semester will be displayed. If no usecase exists it will display “Currently there were no classes taught by professor”.

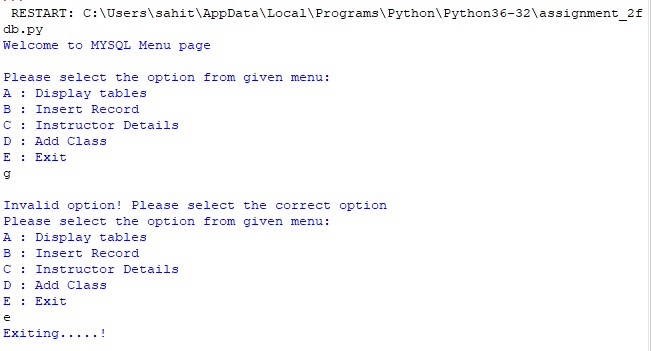
1. Add\_class() function :

This function helps to add a class to the instructor. User is requested to enter the user id and course id. If these user id and course id matches to the existing table (teaches and course) it will display class already exists. If it do not match then user is requested to enter details which will be inserted into SECTION,COURSE and TEACHES tables. Post insertion all the details will be displayed.

1. Exit() function :

Termiantes the program.

1. If user opts any wrong option from given list it will display invalid option statement.



**OUTPUT FOR GIVEN QUERIES :**

1. Download the University database from the class textbook website and load it to your local MySQL database server.

[https://www.d](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[b](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[-](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[book.com/universit](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[y](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[-](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[la](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[b](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[-](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[dir/sample\_table](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

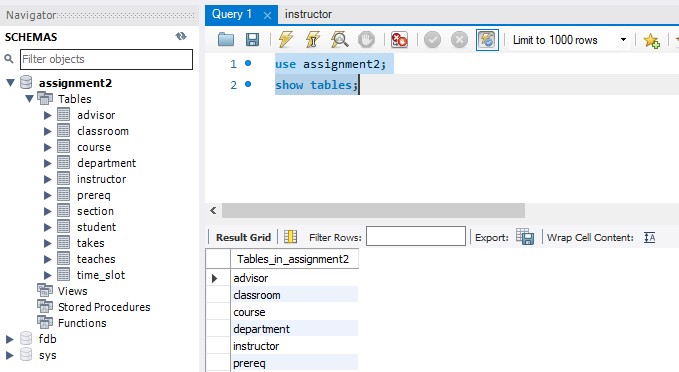
[s](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[-](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

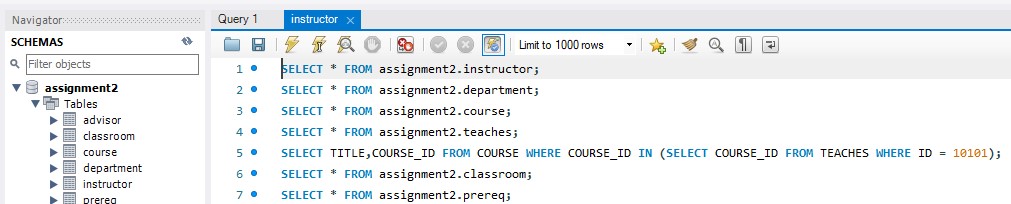
[dir/DDL.s](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

[q](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)

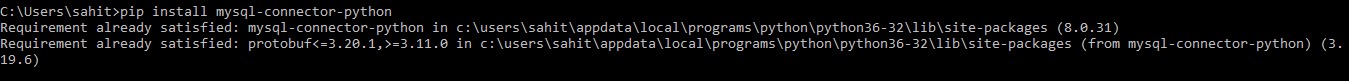
[l](https://www.db-book.com/university-lab-dir/sample_tables-dir/DDL.sql)



1. Load the simple data set.

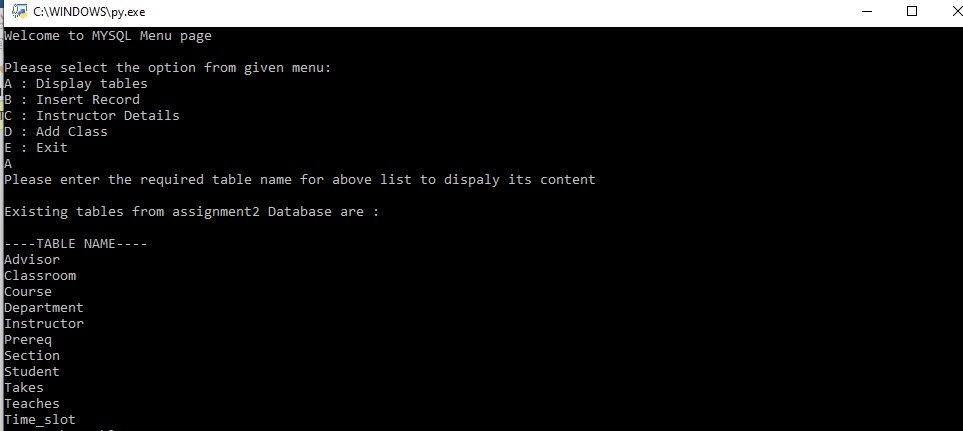


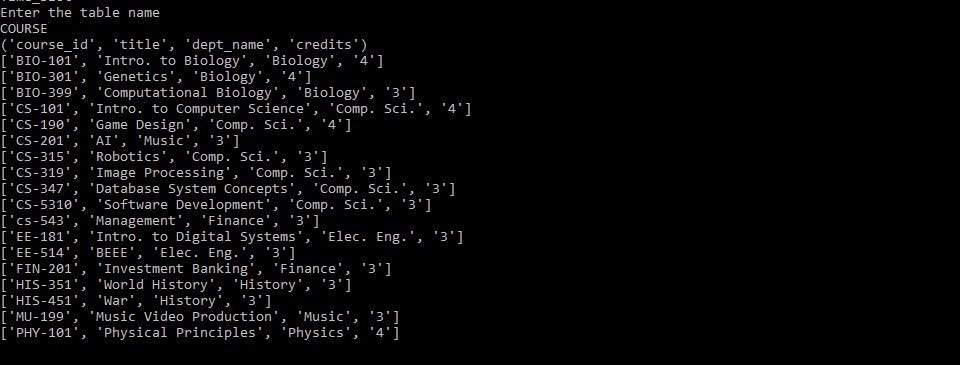
c.Download the database driver (mysql-connector) set it up with your system



d. Create a Java program to display the content of any table in the database. When the table name is given, it should display the content of the table.

i. Program should ask the table name to display when selecting the display data option from the main menu. Then display the content of the selected table.

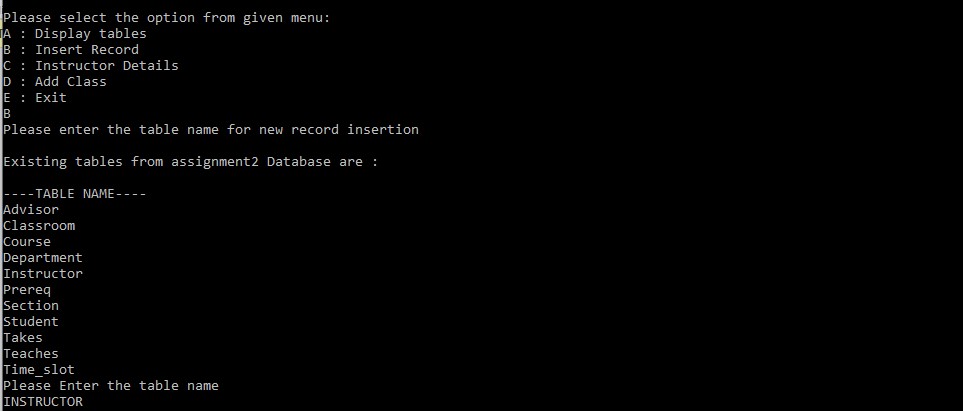




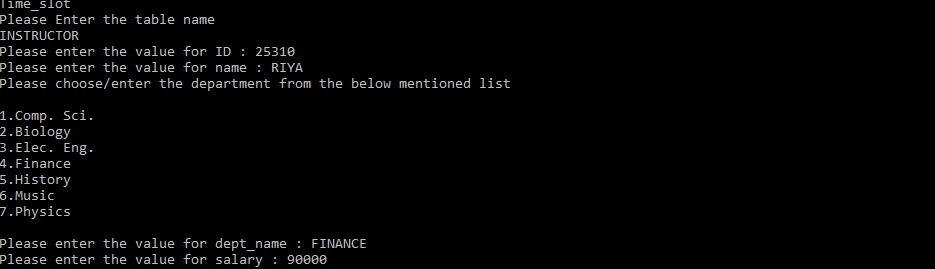
e. Add the functionality to insert record to the instructor table.

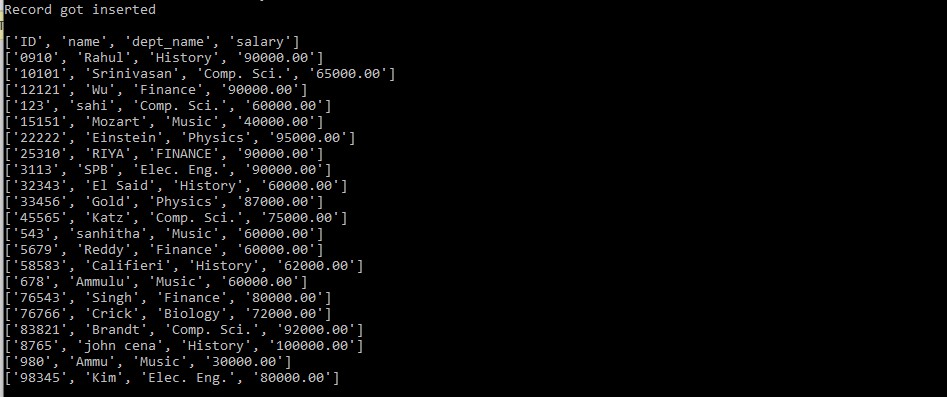
1. User should be able to select the option to insert data from the main

menu



1. User should be asked to enter each column data one after the other and once the final column data is inserted, it should insert the data to the instructor table.

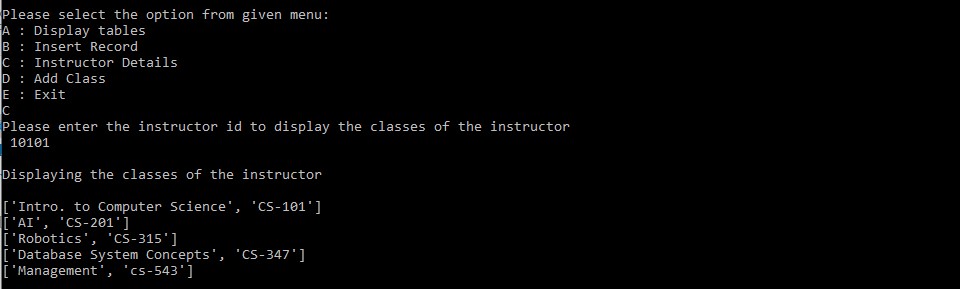


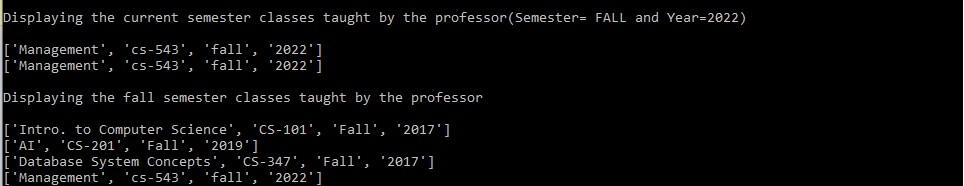


f. Add a main menu item to select set of classes of a given instructor

* 1. Program should ask the instructor id to display the classes of the instructor.

* 1. The program should list the classes that the given instructor teaches in the current semester. Instructor may have previous records of teaching in previous semester, we do not need to display them.





g. Add a main menu item to add a class to an existing instructor

1. User should be able to insert the instructor id to who you need to assign a class

1. The user is presented to enter the class information. You must insert the information in corresponding relation/s.

