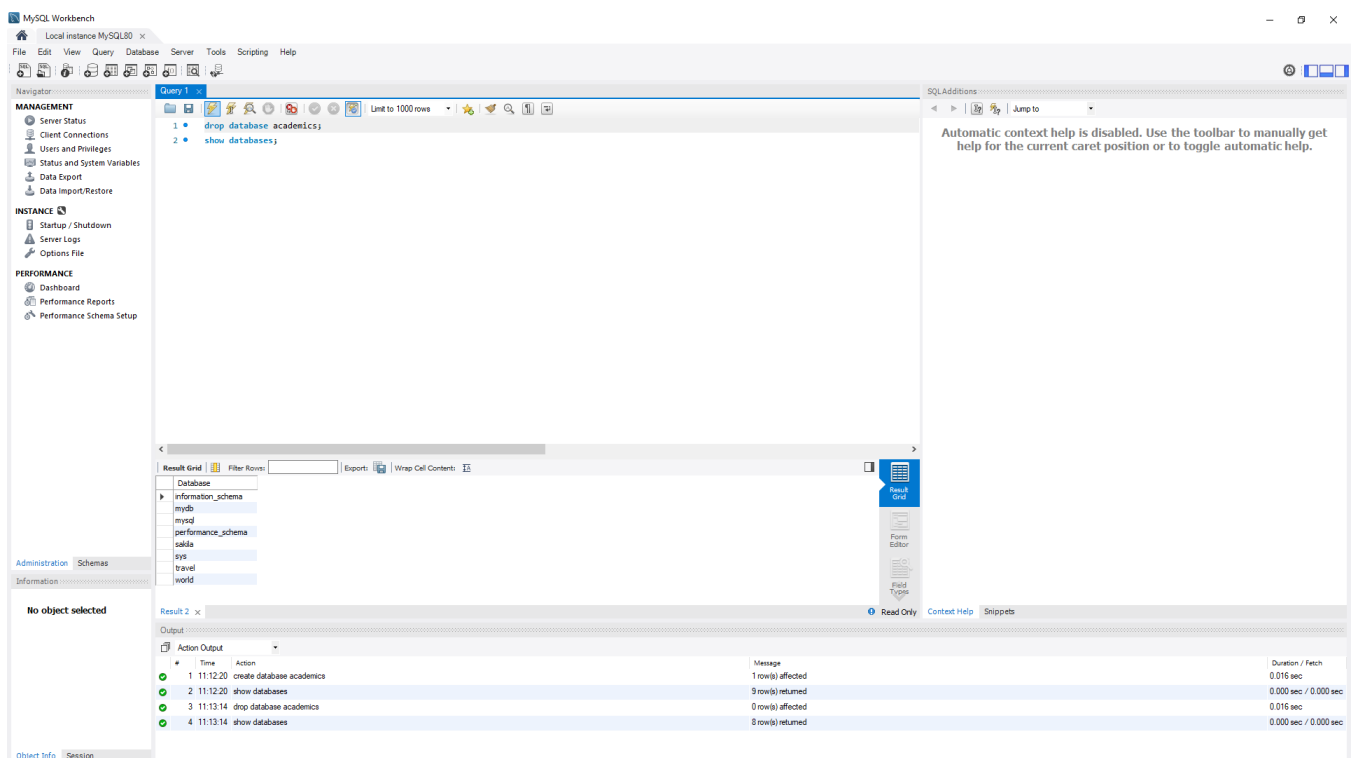
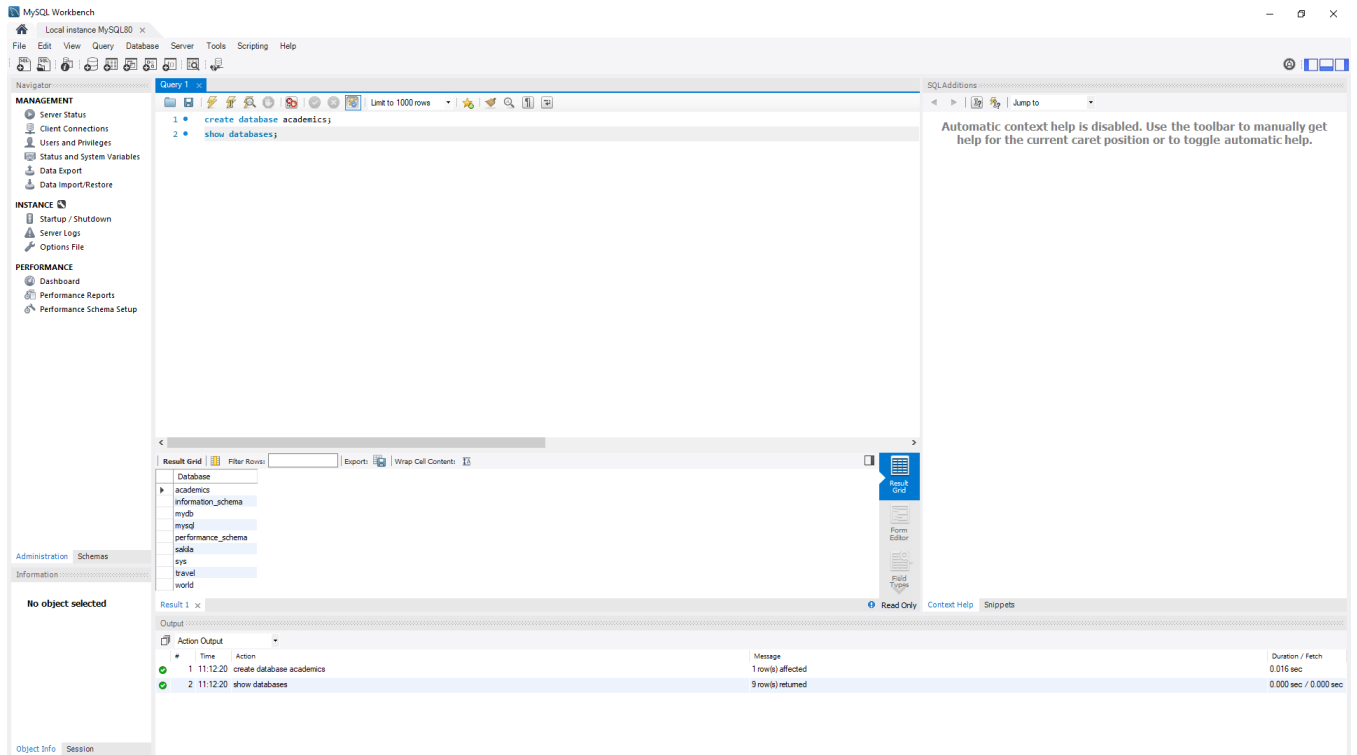
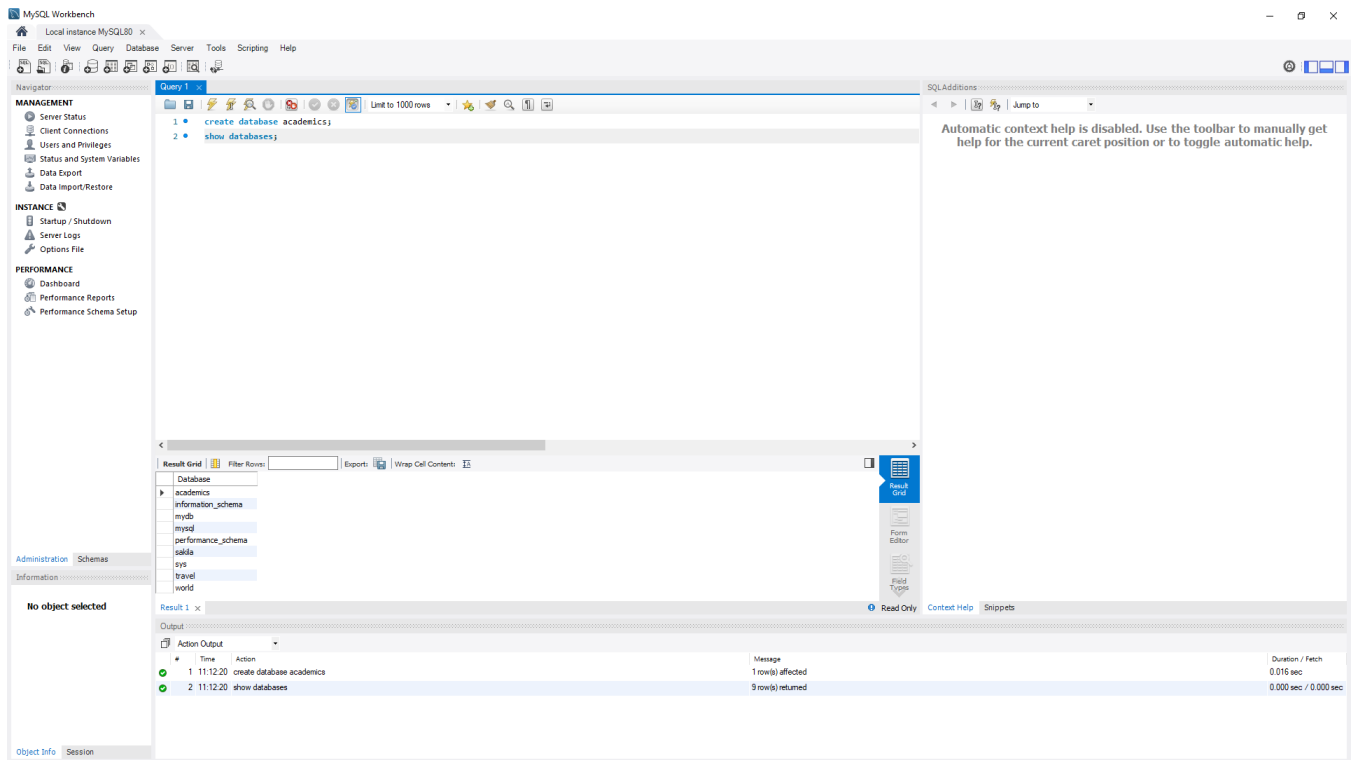


DBMS Assignment-3

1. Show how to Create and Drop Database.



2. Show all the Databases are in the system :



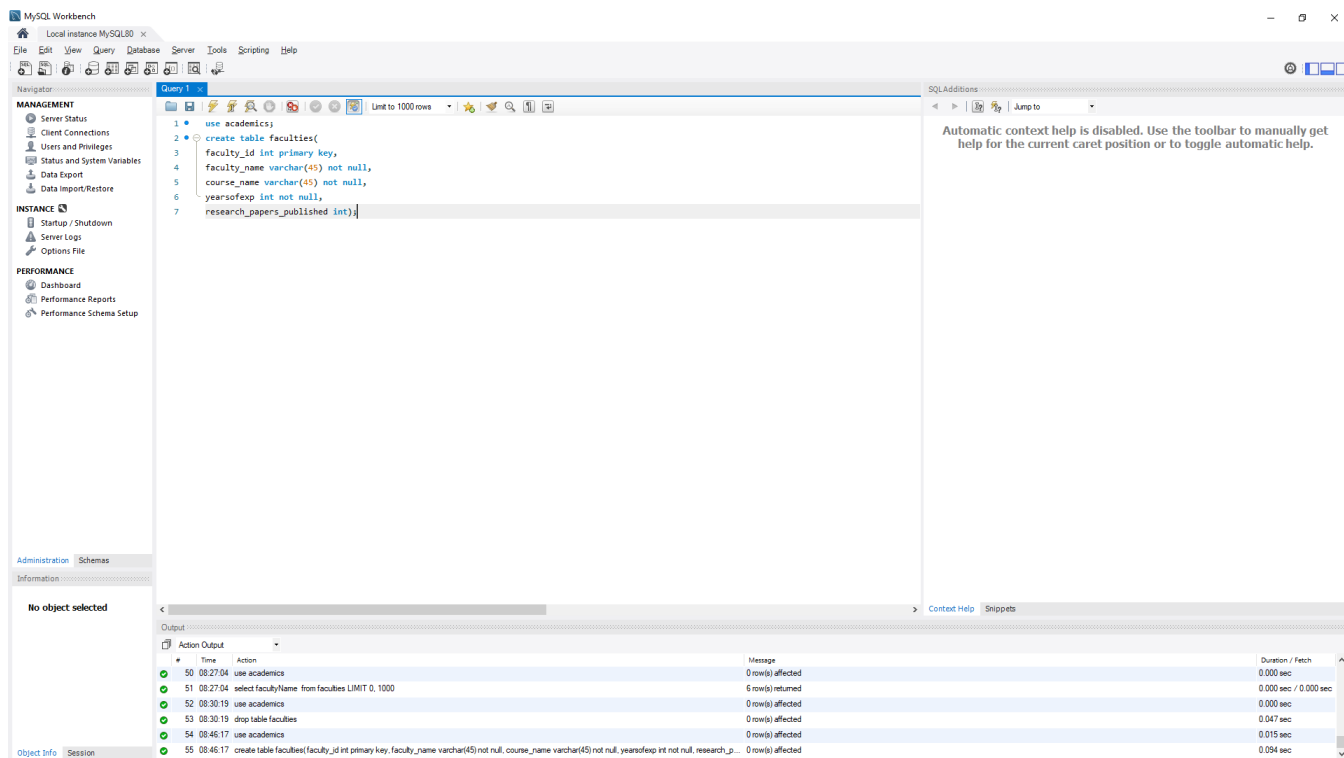
The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'MANAGEMENT' section with options like Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, and Data Import/Restore. The 'INSTANCE' section includes Startup / Shutdown, Server Logs, and Options File. The 'PERFORMANCE' section includes Dashboard, Performance Reports, and Performance Schema Setup. The main query editor shows two queries: `create database academics;` and `show databases;`. The 'Result Grid' at the bottom displays the output of the second query, listing all databases in the system.

Database
academics
information_schema
mydb
mytest
performance_schema
sakila
sys
travel
world

The 'Output' section at the bottom shows the execution results of the queries:

#	Time	Action	Message	Duration / Fetch
1	11:12:20	create database academics	1 row(s) affected	0.016 sec
2	11:12:20	show databases	9 row(s) returned	0.000 sec / 0.000 sec

3. Create Table for your Database



The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'MANAGEMENT' section with options like Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, and Data Import/Restore. The 'INSTANCE' section includes Startup / Shutdown, Server Logs, and Options File. The 'PERFORMANCE' section includes Dashboard, Performance Reports, and Performance Schema Setup. The main query editor shows two queries: `use academics;` and `create table faculties(faculty_id int primary key, faculty_name varchar(45) not null, course_name varchar(45) not null, yearsofexp int not null, research_papers_published int);`. The 'Result Grid' at the bottom displays the output of the second query, showing the table structure.

Table	Columns
faculties	faculty_id int primary key, faculty_name varchar(45) not null, course_name varchar(45) not null, yearsofexp int not null, research_papers_published int

The 'Output' section at the bottom shows the execution results of the queries:

#	Time	Action	Message	Duration / Fetch
50	08:27:04	use academics	0 row(s) affected	0.000 sec
51	08:27:04	select facultyName from faculties LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
52	08:30:19	use academics	0 row(s) affected	0.000 sec
53	08:30:19	drop table faculties	0 row(s) affected	0.047 sec
54	08:46:17	use academics	0 row(s) affected	0.015 sec
55	08:46:17	create table faculties(faculty_id int primary key, faculty_name varchar(45) not null, course_name varchar(45) not null, yearsofexp int not null, research_papers_published int)	0 row(s) affected	0.094 sec

4. Show how select can be used for Creating table

The screenshot shows the MySQL Workbench interface. The Query window contains the following SQL script:

```
1 • use academics;
2 • create table faculty as select faculty_id, yearsofexp from faculties;
3 • desc faculty;
```

The Results window displays the output of the `DESC` command for the `faculty` table:

Field	Type	Null	Key	Default	Extra
faculty_id	int	NO			INDEX
yearsofexp	int	NO			

The Output window shows the execution log:

#	Time	Action	Message	Duration / Fetch
53	08:30:19	drop table faculties	0 row(s) affected	0.047 sec
54	08:46:17	use academics	0 row(s) affected	0.015 sec
55	08:46:17	create table faculties(faculty_id int primary key, faculty_name varchar(45) not null, course_name varchar(45) not null, yearsofexp int not null, research_p...	0 row(s) affected	0.094 sec
56	08:51:34	use academics	0 row(s) affected	0.009 sec
57	08:51:34	create table faculty as select faculty_id, yearsofexp from faculties	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.078 sec
58	08:51:34	desc faculty	2 row(s) returned	0.015 sec / 0.000 sec

5. Drop table

The screenshot shows the MySQL Workbench interface. The Query window contains the following SQL script:

```
1 • use academics;
2 • drop table faculty;
3 • show tables;
```

The Results window displays the output of the `SHOW TABLES` command:

Tables_in_academics
faculties

The Output window shows the execution log:

#	Time	Action	Message	Duration / Fetch
56	08:51:34	use academics	0 row(s) affected	0.000 sec
57	08:51:34	create table faculty as select faculty_id, yearsofexp from faculties	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.078 sec
58	08:51:34	desc faculty	2 row(s) returned	0.015 sec / 0.000 sec
59	08:58:05	use academics	0 row(s) affected	0.000 sec
60	08:58:05	drop table faculty	0 row(s) affected	0.032 sec
61	08:58:06	show tables	1 row(s) returned	0.016 sec / 0.000 sec

6. Show how to check the schema of the tables

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
1 • use academics;
2 • desc faculties;
```

The left sidebar shows the 'Navigator' pane with 'Schemas' selected. The 'Information' pane shows 'No object selected'. The 'Output' pane shows the results of the query:

Field	Type	Null	Key	Default	Extra
faculty_id	int	NO	PR		
faculty_name	varchar(45)	NO			
course_name	varchar(45)	NO			
years_of_exp	int	NO			
research_papers_published	int	YES			

The 'Output' pane also shows the 'Action Output' table:

Time	Action	Message	Duration / Fetch
58 08:51:34	desc faculty	2 row(s) returned	0.015 sec / 0.000 sec
59 08:58:05	use academics	0 row(s) affected	0.000 sec
60 08:58:05	drop table faculty	0 row(s) affected	0.032 sec
61 08:58:06	show tables	1 row(s) returned	0.016 sec / 0.000 sec
62 08:59:02	use academics	0 row(s) affected	0.000 sec
63 08:59:02	desc faculties	5 row(s) returned	0.000 sec / 0.000 sec

7. Show all the tables from the database

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
1 • use academics;
2 • show tables;
```

The left sidebar shows the 'Navigator' pane with 'Schemas' selected. The 'Information' pane shows 'No object selected'. The 'Output' pane shows the results of the query:

Time	Action	Message	Duration / Fetch
60 08:58:05	drop table faculty	0 row(s) affected	0.032 sec
61 08:58:06	show tables	1 row(s) returned	0.016 sec / 0.000 sec
62 08:59:02	use academics	0 row(s) affected	0.000 sec
63 08:59:02	desc faculties	5 row(s) returned	0.000 sec / 0.000 sec
64 08:59:34	use academics	0 row(s) affected	0.000 sec
65 08:59:34	show tables	1 row(s) returned	0.000 sec / 0.000 sec

8. Insert 5 to 10 rows in each of the tables of your Database

The screenshot shows the MySQL Workbench interface. The 'Query' editor contains an SQL script with 9 lines: 1. `use academics;`, 2. `desc faculties;`, 3. `insert into faculties values(1,"Mahto","probability",2,5);`, 4. `insert into faculties values(2,"Athe","stats",8,4);`, 5. `insert into faculties values(3,"Uma","DBMS",10,10);`, 6. `insert into faculties values(4,"Rashmi","Linear Algebra",5,5);`, 7. `insert into faculties values(5,"Samuel","Chemistry",6,8);`, 8. `insert into faculties values(6,"Rohit","Maths",1,8);`, 9. (blank line). The 'Result Grid' shows the schema of the 'faculties' table: faculty_id (int, PK), faculty_name (varchar(45)), course_name (varchar(45)), years_of_exp (int), and research_papers_published (int). The 'Output' pane shows the 'Action Output' for the insert statements, with 6 rows of data inserted successfully.

Field	Type	Null	Key	Default	Extra
faculty_id	int	NO	PK		
faculty_name	varchar(45)	NO			
course_name	varchar(45)	NO			
years_of_exp	int	NO			
research_papers_published	int	YES			

Time	Action	Message	Duration / Fetch
09:04:27	insert into faculties values(1,"Mahto","probability",2,5);	1 row(s) affected	0.000 sec
09:04:27	insert into faculties values(2,"Athe","stats",8,4);	1 row(s) affected	0.000 sec
09:04:27	insert into faculties values(3,"Uma","DBMS",10,10);	1 row(s) affected	0.000 sec
09:04:27	insert into faculties values(4,"Rashmi","Linear Algebra",5,5);	1 row(s) affected	0.000 sec
09:04:27	insert into faculties values(5,"Samuel","Chemistry",6,8);	1 row(s) affected	0.000 sec
09:04:27	insert into faculties values(6,"Rohit","Maths",1,8);	1 row(s) affected	0.015 sec

9. Show usage of Simple Select Statement

The screenshot shows the MySQL Workbench interface. The 'Query' editor contains an SQL script with 2 lines: 1. `use academics;`, 2. `select faculty_name from faculties;`. The 'Result Grid' shows the output of the select statement, listing the faculty names: Mahto, Athe, Uma, Rashmi, Samuel, and Rohit. The 'Output' pane shows the 'Action Output' for the select statement, with 6 rows of data returned.

Time	Action	Message	Duration / Fetch
09:04:27	insert into faculties values(3,"Uma","DBMS",10,10);	1 row(s) affected	0.000 sec
09:04:27	insert into faculties values(4,"Rashmi","Linear Algebra",5,5);	1 row(s) affected	0.000 sec
09:04:27	insert into faculties values(5,"Samuel","Chemistry",6,8);	1 row(s) affected	0.015 sec
09:04:27	insert into faculties values(6,"Rohit","Maths",1,8);	1 row(s) affected	0.000 sec
09:05:45	use academics;	0 row(s) affected	0.000 sec
09:05:45	select faculty_name from faculties;	6 row(s) returned	0.000 sec / 0.000 sec

10. Select Statement using Relational and Logical operators.

The screenshot shows the MySQL Workbench interface. The query editor contains two queries: `use academics;` and `select faculty_name from faculties where yearsofexp<4`. The output pane shows the results of the second query, displaying a table with two columns: `faculty_name` and `Right`. The results are as follows:

faculty_name	Right
Atho	
Right	

The bottom pane shows the Action Output log, which includes the following entries:

#	Time	Action	Message	Duration / Fetch
80	09:09:47	use academics	0 row(s) affected	0.000 sec
81	09:09:47	desc faculties	5 row(s) returned	0.016 sec / 0.000 sec
82	09:10:24	use academics	0 row(s) affected	0.000 sec
83	09:10:24	select faculty_name from faculties where yearsofexp>4 LIMIT 0, 1000	4 row(s) returned	0.015 sec / 0.000 sec
84	09:11:13	use academics	0 row(s) affected	0.000 sec
85	09:11:13	select faculty_name from faculties where yearsofexp<4 LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

a)

The screenshot shows the MySQL Workbench interface. The query editor contains two queries: `use academics;` and `select faculty_name from faculties where yearsofexp==4`. The output pane shows the results of the second query, displaying a table with two columns: `faculty_name` and `Athe`. The results are as follows:

faculty_name	Athe
Athe	

The bottom pane shows the Action Output log, which includes the following entries:

#	Time	Action	Message	Duration / Fetch
86	09:11:54	use academics	0 row(s) affected	0.000 sec
87	09:11:54	select faculty_name from faculties where yearsofexp==4	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use ne...	0.000 sec
88	09:12:04	use academics	0 row(s) affected	0.000 sec
89	09:12:04	select faculty_name from faculties where yearsofexp=4 LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
90	09:13:11	use academics	0 row(s) affected	0.000 sec
91	09:13:11	select faculty_name from faculties where yearsofexp=8 LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

b)

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigation

MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

Query 1

```
1 • use academics;
2 • select faculty_name from faculties where yearsofexp=4;
```

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

faculty_name
Athe

faculties 19 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
86	09:11:54	use academics	0 row(s) affected	0.000 sec
87	09:11:54	select faculty_name from faculties where yearsofexp=4	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use ne...	0.000 sec
88	09:12:04	use academics	0 row(s) affected	0.000 sec
89	09:12:04	select faculty_name from faculties where yearsofexp=4 LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
90	09:13:11	use academics	0 row(s) affected	0.000 sec
91	09:13:11	select faculty_name from faculties where yearsofexp=8 LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

c)

MySQL Workbench

Lab assignment x

File Edit View Query Database Server Tools Scripting Help

Query 1

```
1 • use academics;
2 • -- select statement using logical operators.
3 • select * from listof_faculty f where f.years_of_experience > 1 and f.subject_name = 'python' ;
4
```

Result Grid

faculty_id	faculty_name	subject_name	subject_code	years_of_experience
2	yash	python	102	2
6	tejaswini	python	161	5

listof_faculty 18 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
162	15:26:06	drop table listof_faculty	0 row(s) affected	0.016 sec
163	15:27:06	insert into listof_faculty values (1, 'yash', 'python', 102, 2)	Error Code: 1146. Table 'academics.listof_faculty' doesn't exist	0.016 sec
164	15:27:36	insert into listof_faculty values (1, 'yash', 'python', 102, 2)	Error Code: 1146. Table 'academics.listof_faculty' doesn't exist	0.009 sec
165	15:27:40	create table listof_faculty (faculty_id INT NOT NULL PRIMARY KEY AUTO_INCREMENT, faculty_name VARCHAR(225) NOT NULL, subject_name VARCHAR(225) NOT NULL, years_of_experience INT NOT NULL)	0 row(s) affected	0.125 sec
166	15:27:44	insert into listof_faculty values (1, 'yash', 'python', 102, 2)	1 row(s) affected	0.031 sec
167	15:27:44	insert into listof_faculty values (2, 'yash', 'python', 102, 2)	1 row(s) affected	0.016 sec
168	15:27:47	insert into listof_faculty values (3, 'yash', 'python', 102, 2)	1 row(s) affected	0.016 sec
169	15:27:49	insert into listof_faculty values (4, 'yash', 'python', 102, 2)	1 row(s) affected	0.000 sec
170	15:27:50	insert into listof_faculty values (5, 'yash', 'python', 102, 2)	1 row(s) affected	0.016 sec
171	15:27:51	insert into listof_faculty values (6, 'yash', 'python', 102, 2)	1 row(s) affected	0.000 sec
172	15:27:52	select * from listof_faculty LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
173	15:29:09	select * from listof_faculty f where f.years_of_experience > 3 and f.subject_name = 'python'	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '=' at line 1	0.000 sec
174	15:29:29	select * from listof_faculty f where f.years_of_experience > 3 and f.subject_name = 'python' LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
175	15:29:51	select * from listof_faculty f where f.years_of_experience > 1 and f.subject_name = 'python' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

d)

11. One simple Subquery using select

The screenshot shows the MySQL Workbench interface. The main editor displays the following SQL query:

```
1 • use academics;
2 • select * from faculties where faculty_id in (select faculty_id from faculties where research_papers_published > 4)
```

The left sidebar contains the following sections:

- MANAGEMENT**
 - Server Status
 - Client Connections
 - Users and Privileges
 - Status and System Variables
 - Data Export
 - Data Import/Restore
- INSTANCE**
 - Startup / Shutdown
 - Server Logs
 - Options File
- PERFORMANCE**
 - Dashboard
 - Performance Reports
 - Performance Schema Setup

The bottom section shows the **Result Grid** with the following data:

faculty_id	faculty_name	course_name	years_of_exp	research_papers_published
1	Mahito	probability	2	8
3	Uma	DBMS	10	10
4	Raahm	Linear Algebra	5	5
5	Samuel	Chemistry	6	8
6	Rohit	Maths	1	8

The **Output** section shows the execution log:

Time	Action	Message	Duration / Fetch
94 09:15:59	use academics	0 row(s) affected	0.000 sec
95 09:15:59	desc faculties -- select * from faculties where faculty_id in (select faculty_id from faculties where)	5 row(s) returned	0.000 sec / 0.000 sec
96 09:16:41	use academics	0 row(s) affected	0.000 sec
97 09:16:41	select * from faculties where faculty_id in (select faculty_id from faculties where research_papers_published > 4) LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
98 09:20:31	use academics	0 row(s) affected	0.000 sec
99 09:20:31	select * from faculties where faculty_id in (select faculty_id from faculties where research_papers_published > 4) LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec