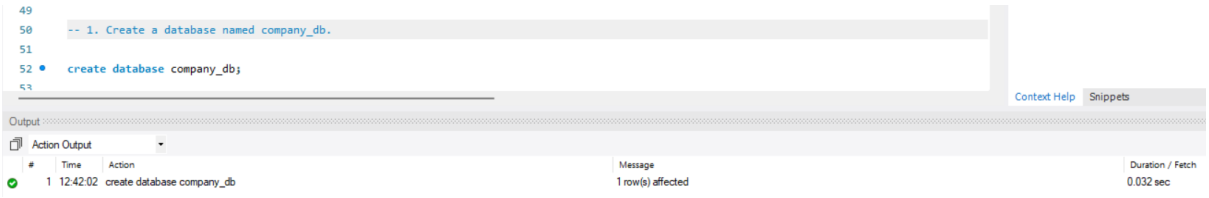
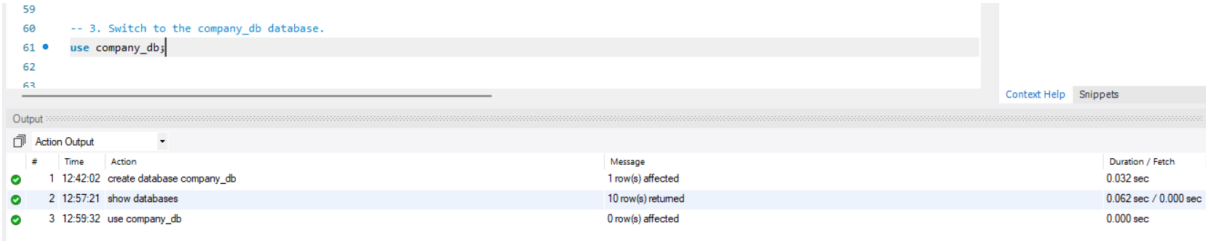
1. Create a database named company_db.

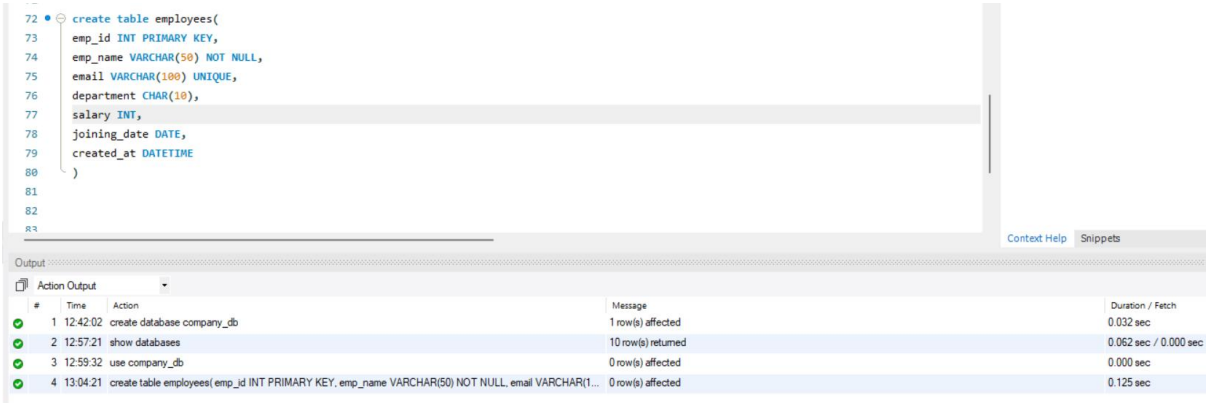


2. Display all available databases.

3. Switch to the company_db database.



4. Create a table named employees.



5. Insert at least 5 employee records into the table.

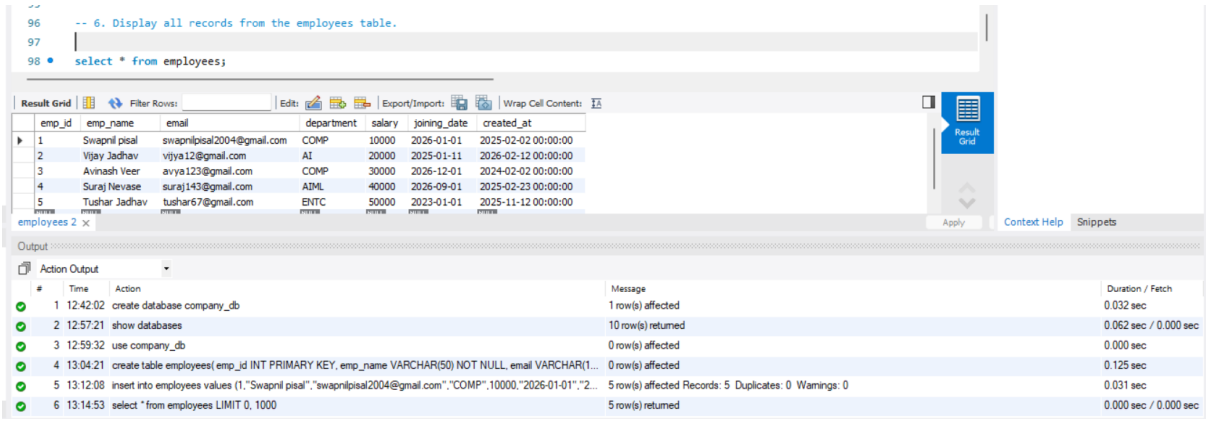
```
insert into employees values
(1,"Swapnil pisal","swapnilpisal2004@gmail.com","COMP",10000,"2026-01-01","2025-02-02"),
(2,"Vijay Jadhav","vijya12@gmail.com","AI",20000,"2025-01-11","2026-02-12"),
(3,"Avinash Veer","avya123@gmail.com","COMP",30000,"2026-12-01","2024-02-02"),
(4,"Suraj Nevase","suraj143@gmail.com","AIML",40000,"2026-09-01","2025-02-23"),
(5,"Tushar Jadhav","tushar67@gmail.com","ENTC",50000,"2023-01-01","2025-11-12");
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	12:42:02	create database company_db	1 row(s) affected	0.032 sec
2	12:57:21	show databases	10 row(s) returned	0.062 sec / 0.000 sec
3	12:59:32	use company_db	0 row(s) affected	0.000 sec
4	13:04:21	create table employees(emp_id INT PRIMARY KEY, emp_name VARCHAR(50) NOT NULL, email VARCHAR(1...	0 row(s) affected	0.125 sec
5	13:12:08	insert into employees values (1,"Swapnil pisal","swapnilpisal2004@gmail.com","COMP",10000,"2026-01-01","2...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.031 sec

6. Display all records from the employees table.



```
-- 6. Display all records from the employees table.

select * from employees;
```

Result Grid

emp_id	emp_name	email	department	salary	joining_date	created_at
1	Swapnil pisal	swapnilpisal2004@gmail.com	COMP	10000	2026-01-01	2025-02-02 00:00:00
2	Vijay Jadhav	vijya12@gmail.com	AI	20000	2025-01-11	2026-02-12 00:00:00
3	Avinash Veer	avya123@gmail.com	COMP	30000	2026-12-01	2024-02-02 00:00:00
4	Suraj Nevase	suraj143@gmail.com	AIML	40000	2026-09-01	2025-02-23 00:00:00
5	Tushar Jadhav	tushar67@gmail.com	ENTC	50000	2023-01-01	2025-11-12 00:00:00

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	12:42:02	create database company_db	1 row(s) affected	0.032 sec
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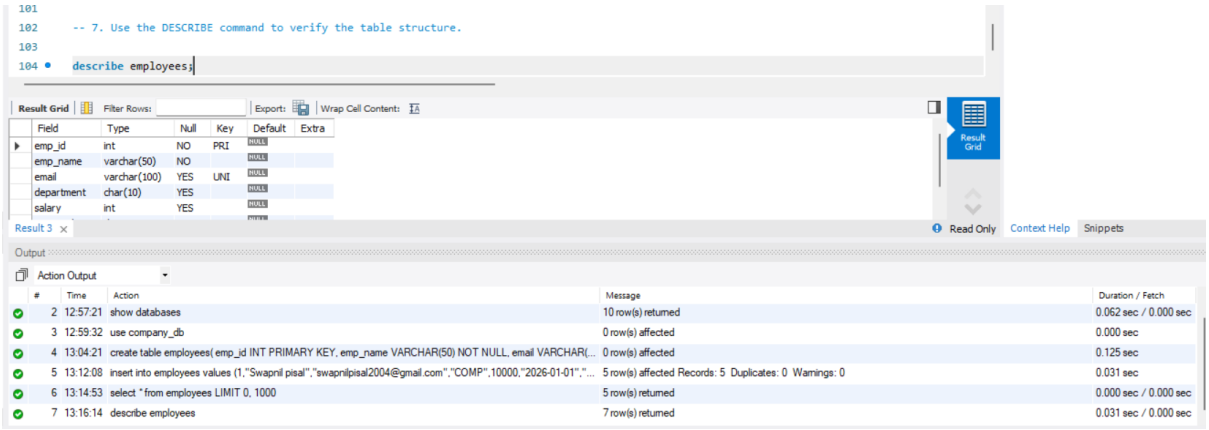
5	13:12:08	insert into employees values (1,"Swapnil pisal","swapnilpisal2004@gmail.com","COMP",10000,"2026-01-01","2...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.031 sec
6	13:14:53	select * from employees LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

7. Use the DESCRIBE command to verify the table structure.



```
-- 7. Use the DESCRIBE command to verify the table structure.

describe employees;
```

Result Grid

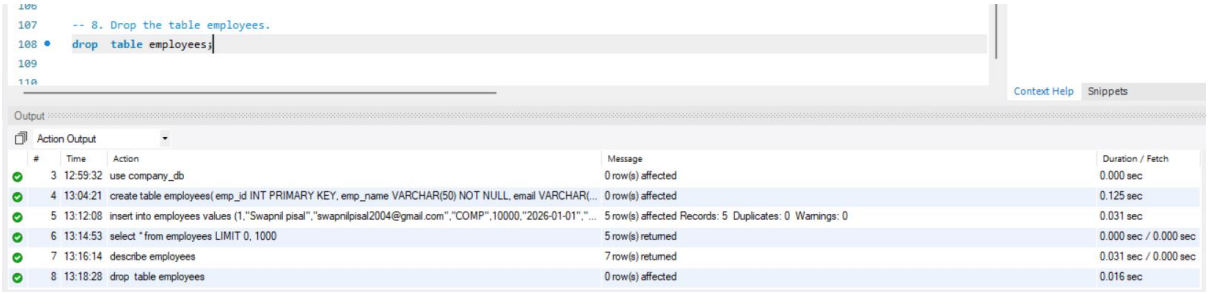
Field	Type	Null	Key	Default	Extra
emp_id	int	NO	PRI	NULL	
emp_name	varchar(50)	NO		NULL	
email	varchar(100)	YES	UNI	NULL	
department	char(10)	YES		NULL	
salary	int	YES		NULL	

Output

Action Output

#	Time	Action	Message	Duration / Fetch
2	12:57:21	show databases	10 row(s) returned	0.062 sec / 0.000 sec
3	12:59:32	use company_db	0 row(s) affected	0.000 sec
4	13:04:21	create table employees(emp_id INT PRIMARY KEY, emp_name VARCHAR(50) NOT NULL, email VARCHAR(...	0 row(s) affected	0.125 sec
5	13:12:08	insert into employees values (1,"Swapnil pisal","swapnilpisal2004@gmail.com","COMP",10000,"2026-01-01","...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.031 sec
6	13:14:53	select * from employees LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
7	13:16:14	describe employees	7 row(s) returned	0.031 sec / 0.000 sec

8. Drop the table employees.



```
106
107     -- 8. Drop the table employees.
108 •   drop  table employees;
109
110
```

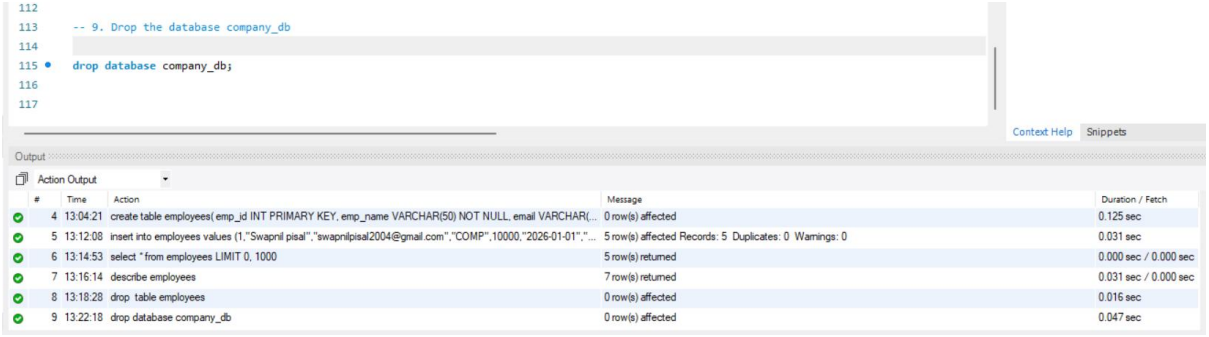
Context Help | Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
3	12:59:32	use company_db	0 row(s) affected	0.000 sec
4	13:04:21	create table employees(emp_id INT PRIMARY KEY, emp_name VARCHAR(50) NOT NULL, email VARCHAR(...	0 row(s) affected	0.125 sec
5	13:12:08	insert into employees values (1,''Swapnil pisal'','swapnilpisal2004@gmail.com','COMP',10000,'2026-01-01','...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.031 sec
6	13:14:53	select * from employees LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
7	13:16:14	describe employees	7 row(s) returned	0.031 sec / 0.000 sec
8	13:18:28	drop table employees	0 row(s) affected	0.016 sec

9. Drop the database company_db



```
112
113     -- 9. Drop the database company_db
114
115 •   drop database company_db;
116
117
```

Context Help | Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
4	13:04:21	create table employees(emp_id INT PRIMARY KEY, emp_name VARCHAR(50) NOT NULL, email VARCHAR(...	0 row(s) affected	0.125 sec
5	13:12:08	insert into employees values (1,''Swapnil pisal'','swapnilpisal2004@gmail.com','COMP',10000,'2026-01-01','...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.031 sec
6	13:14:53	select * from employees LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
7	13:16:14	describe employees	7 row(s) returned	0.031 sec / 0.000 sec
8	13:18:28	drop table employees	0 row(s) affected	0.016 sec
9	13:22:18	drop database company_db	0 row(s) affected	0.047 sec

Part A: Theory

Answer the following questions briefly and clearly:

1. What is a database in MySQL? Why is it important to organize data into databases?

ans -: 1) database it is collection , storing , managing , accesing , retiving the data .

2) It is easy to acesses and view the data .

2. Explain the difference between INT and BIGINT. When would you prefer one over the other?

ans -: 1) int -: it can be used to store the integer number in the database or table .

eg. id , roll no , etc.

2) bigint it can also stored the numberin the database or table but it can store the big number.

eg. phone number , adhar number

3. What is a PRIMARY KEY? Mention two rules that a primary key must follow.

ans -: 1) Primar key it is unique key .

2) It is not repeated use

3) Null value not access value must be fiiled

eg. Id , Roll number

4. Differentiate between CHAR and VARCHAR with one practical example.

ans -: 1) char it use the when charcter size known

eg. division char(1)

2) varchar it use when chacter sige are not known

Eg.name varchar(30)

5. What is the purpose of NOT NULL and UNIQUE constraints?

ans -: 1) NOT NULL -: value should fill null values not insert into database or table

2) unique -: it not repeated values insert into table , null value not in table

eg. primary key