

## Que 3: Create a table – Employees and Incentive

3. Create table given below: Employee and Incentive

Table Name: Employee

Employee_id	First_name	Last_name	Salary	Joining_date	Department
1	John	Abraham	1000000	01-JAN-13 12:00:00 AM	Banking
2	Michael	Clarke	800000	01-JAN-13 12:00:00 AM	Insurance
3	Roy	Thomas	700000	01-FEB-13 12:00:00 AM	Banking
4	Tom	Jose	600000	01-FEB-13 12:00:00 AM	Insurance
5	Jerry	Pinto	650000	01-FEB-13 12:00:00 AM	Insurance
6	Philip	Mathew	750000	01-JAN-13 12:00:00 AM	Services
7	TestName1	123	650000	01-JAN-13 12:00:00 AM	Services
8	TestName2	Lname%	600000	01-FEB-13 12:00:00 AM	Insurance

Table Name: Incentive

Employee_ref_id	Incentive_date	Incentive_amount
1	01-FEB-13	5000
2	01-FEB-13	3000
3	01-FEB-13	4000
1	01-JAN-13	4500
2	01-JAN-13	3500

solution:→

### Table 1: Employee

### Employee Table Create Query

The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the following SQL query:

```
1 • use assignmentdatabase;
2
3 • CREATE TABLE EMPLOYEE(Employee_id int,First_name varchar(50),Last_name varchar(50),salary int,Joining_date varchar(50),Department varchar(50));
```

The 'Output' tab shows the execution results:

#	Time	Action	Message	Duration / Fetch
1	11:26:42	use assignmentdatabase	0 row(s) affected	0.000 sec
2	11:26:42	DESC Employee	6 row(s) returned	0.016 sec / 0.000 sec
3	11:32:30	use assignmentdatabase	Error Code: 1049. Unknown database 'assignmentdatabase'	0.000 sec
4	11:32:39	use assignmentdatabase	0 row(s) affected	0.000 sec
5	11:32:39	CREATE TABLE EMPLOYEE(Employee_id int,First_name varchar(50),Last_name varchar(50),salary int,Joining_date varchar(50),Department varchar(50));	Error Code: 1050. Table 'employee' already exists	0.031 sec

# Employee Table Desc Query

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

```
1 use assignmentdatabase;
2
3 DESC Employee;
4
```

The result grid displays the structure of the Employee table:

Field	Type	Null	Key	Default	Extra
Employee_id	int	YES		NULL	
First_name	varchar(50)	YES		NULL	
Last_name	varchar(50)	YES		NULL	
Salary	int	YES		NULL	
Joining_date	varchar(50)	YES		NULL	
Department	varchar(50)	YES		NULL	

The Action Output pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
31	16:22:16	use assignmentdatabase	0 row(s) affected	0.000 sec
32	16:22:16	CREATE trigger TR after insert ON Employee for each row BEGIN insert into view values...	0 row(s) affected	0.032 sec
33	16:29:54	use assignmentdatabase	0 row(s) affected	0.000 sec
34	16:29:54	DESC Incentive	3 row(s) returned	0.016 sec / 0.000 sec
35	16:33:22	use assignmentdatabase	0 row(s) affected	0.000 sec
36	16:33:22	DESC Employee	6 row(s) returned	0.000 sec / 0.000 sec

# Employee Table Insert Query

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

```
1 use assignmentdatabase;
2
3 insert into Employee values('1','John','Abraham','1000000','01-JAN-13 12.00.00 AM','Banking')
4
5 ,('2','Michael','Clarke','800000','01-JAN-13 12.00.00 AM','Insurance')
6
7 ,('3','Roy','Thomas','700000','01-FEB-13 12.00.00 AM','Banking')
8
9 ,('4','Tom','Jose','600000','01-FEB-13 12.00.00 AM','Insurance')
10
11 ,('5','Jerry','Pinto','650000','01-FEB-13 12.00.00 AM','Insurance')
12
13 ,('6','Philip','Mathew','750000','01-JAN-13 12.00.00 AM','Services')
14
15 ,('7','TestName1','123','650000','01-JAN-13 12.00.00 AM','Services')
16
17 ,('8','TestName2','Lname','600000','01-FEB-13 12.00.00 AM','Insurance');
18
```

The Action Output pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
6	11:59:52	use assignmentdatabase	0 row(s) affected	0.000 sec
7	11:59:52	DESC Employee	6 row(s) returned	0.016 sec / 0.000 sec
8	12:46:43	use assignmentdatabase	0 row(s) affected	0.000 sec
9	12:46:43	insert into Employee values('1','John','Abraham','1000000','01-JAN-13 12.00.00 AM','Banking')...	8 row(s) affected Records: 8 Duplicates: 0 Warnings: 0	0.015 sec
10	12:48:00	use assignmentdatabase	0 row(s) affected	0.000 sec
11	12:48:00	select from Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

# Employee Table Select Query

MySQL Workbench

Local instance MySQL80

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

Administration

Schemas

Information

No object selected

Object Info

Session

SQL File 3\*

Limit to 1000 rows

1 use assignmentdatabase;

2

3 SELECT \* FROM Employee;

4

5

Result Grid

Filter Rows:

Exports: | Wrap Cell Contents

	Employee_id	First_name	Last_name	Salary	Joining_date	Department
1	John	Abraham	1000000	01-JAN-13 12.00.00 AM	Banking	
2	Michael	Clarke	800000	01-JAN-13 12.00.00 AM	Insurance	
3	Roy	Thomas	700000	01-FEB-13 12.00.00 AM	Banking	
4	Tom	Jose	600000	01-FEB-13 12.00.00 AM	Insurance	
5	Jerry	Pinto	650000	01-FEB-13 12.00.00 AM	Insurance	
6	Philip	Mathew	750000	01-JAN-13 12.00.00 AM	Services	
7	TestName1	123	650000	01-JAN-13 12.00.00 AM	Services	
8	TestName2	Lname%	600000	01-FEB-13 12.00.00 AM	Insurance	

Result Grid

Form Editor

Employee 2

Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
8	12:46:43	use assignmentdatabase	0 row(s) affected	0.000 sec
9	12:46:43	insert into Employee values('1','John','Abraham','1000000','01-JAN-13 12.00.00 AM','Banking'...	8 row(s) affected Records: 8 Duplicates: 0 Warnings: 0	0.015 sec
10	12:48:00	use assignmentdatabase	0 row(s) affected	0.000 sec
11	12:48:00	select * from Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
12	12:55:56	use assignmentdatabase	0 row(s) affected	0.000 sec
13	12:55:56	SELECT * FROM Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

Query Completed

## Table 2: Incentive

### Incentive Table Create Query

The screenshot shows the MySQL Workbench interface with the 'CREATE TABLE INCENTIVE' query entered in the query editor. The query is as follows:

```
1 use assignmentdatabase;
2
3 CREATE TABLE Incentive(Employee_ref_id int, Incentive_date varchar(50), incentive_amount int);
```

The left sidebar shows the 'MANAGEMENT' and 'INSTANCE' sections. The 'Output' tab at the bottom displays the execution results:

#	Time	Action	Message	Duration / Fetch
4	11:32:39	use assignmentdatabase	0 row(s) affected	0.000 sec
5	11:32:39	CREATE TABLE EMPLOYEE(Employee_id int, First_name varchar(50), Last_name varchar(50))	Error Code: 1050. Table 'employee' already exists	0.031 sec
6	11:46:17	use assignmentdatabase	0 row(s) affected	0.000 sec
7	11:46:17	DESC Incentive	3 row(s) returned	0.016 sec / 0.000 sec
8	11:48:21	use assignmentdatabase	0 row(s) affected	0.000 sec
9	11:48:21	CREATE TABLE Incentive(Employee_ref_id int, Incentive_date varchar(50), incentive_amount int)	Error Code: 1050. Table 'incentive' already exists	0.016 sec

### Incentive Table Desc Query

The screenshot shows the MySQL Workbench interface with the 'DESC Incentive' query entered in the query editor. The query is as follows:

```
1 use assignmentdatabase;
2
3 DESC Incentive;
```

The left sidebar shows the 'MANAGEMENT' and 'INSTANCE' sections. The 'Result Grid' tab at the bottom displays the table structure:

Field	Type	Null	Key	Default	Extra
Employee_ref_id	int	YES		NULL	
Incentive_date	varchar(50)	YES		NULL	
Incentive_amount	int	YES		NULL	

The 'Output' tab at the bottom displays the execution results:

#	Time	Action	Message	Duration / Fetch
29	16:05:55	use assignmentdatabase	0 row(s) affected	0.000 sec
30	16:05:55	SELECT Employee.First_name, Incentive.Incentive_amount FROM Employee INNER JOIN Incentive ON Employee.Employee_id = Incentive.Employee_ref_id	4 row(s) returned	0.000 sec / 0.000 sec
31	16:22:16	use assignmentdatabase	0 row(s) affected	0.000 sec
32	16:22:16	CREATE trigger TR after insert ON Employee for each row BEGIN insert into view values(First_name, Last_name, Employee_ref_id, Incentive_date, Incentive_amount);	0 row(s) affected	0.032 sec
33	16:29:54	use assignmentdatabase	0 row(s) affected	0.000 sec
34	16:29:54	DESC Incentive	3 row(s) returned	0.016 sec / 0.000 sec

# Incentive Table Insert Query

The screenshot shows the MySQL Workbench interface with a query editor containing an INSERT statement. The query is as follows:

```
1 use assignmentdatabase;
2
3 INSERT INTO Incentive values('1','01-FEB-13','5000')
4 ,('2','01-FEB-13','3000')
5 ,('3','01-FEB-13','4000')
6 ,('1','01-JAN-13','4500')
7 ,('2','01-JAN-13','3500');
```

The output window displays the execution results:

#	Time	Action	Message	Duration / Fetch
17	13:17:51	DESC Incentive	3 row(s) returned	0.016 sec / 0.000 sec
18	13:20:07	use assignmentdatabase	0 row(s) affected	0.000 sec
19	13:20:07	DESC Incentive	3 row(s) returned	0.000 sec / 0.000 sec
20	13:30:26	use assignmentdatabase	Error Code: 1049. Unknown database 'assignmentdatabase'	0.000 sec
21	13:30:46	use assignmentdatabase	0 row(s) affected	0.000 sec
22	13:30:46	INSERT INTO Incentive values('1','01-FEB-13','5000'),('2','01-FEB-13','3000'),('3','01-FEB-13','4000'),('1','01-JAN-13','4500'),('2','01-JAN-13','3500');	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.016 sec

# Incentive Table Select Query

The screenshot shows the MySQL Workbench interface with a query editor containing a SELECT statement. The query is as follows:

```
1 use assignmentdatabase;
2
3 SELECT * FROM Incentive;
```

The output window displays the execution results in a table format:

Employee_ref_id	Incentive_date	Incentive_amount
1	01-FEB-13	5000
2	01-FEB-13	3000
3	01-FEB-13	4000
1	01-JAN-13	4500
2	01-JAN-13	3500

The output window also shows the execution details:

#	Time	Action	Message	Duration / Fetch
1	16:44:20	use assignmentdatabase	0 row(s) affected	0.000 sec
2	16:44:20	SELECT * FROM Incentive LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

## a) Get First Name from employee table using Tom name “Employee Name”.

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

```
1 • use assignmentdatabase;  
2  
3 • SELECT First_name AS EmployeeName FROM Employee;
```

The result grid displays the following data:

EmployeeName
John
Michael
Roy
Tom
Jerry
Philip
TestName1

The output pane shows the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
23	13:37:01	use assignmentdatabase	0 row(s) affected	0.000 sec
24	13:37:01	SELECT * FROM Incentive LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
25	13:38:57	use assignmentdatabase	0 row(s) affected	0.000 sec
26	13:38:57	SELECT * FROM Incentive LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
27	13:48:31	use assignmentdatabase	0 row(s) affected	0.000 sec
28	13:48:31	SELECT First_name AS EmployeeName FROM Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

SQL script saved to: 'C:\Users\Aditya\Documents\SELECT FIRSTNAME FROM EMPLOYEE.sql'

## b) Get FIRST\_NAME, Joining Date, and Salary from employee table.

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

```
1 • use assignmentdatabase;  
2  
3  
4 • SELECT First_name,Joining_date,Salary FROM Employee;
```

The result grid displays the following data:

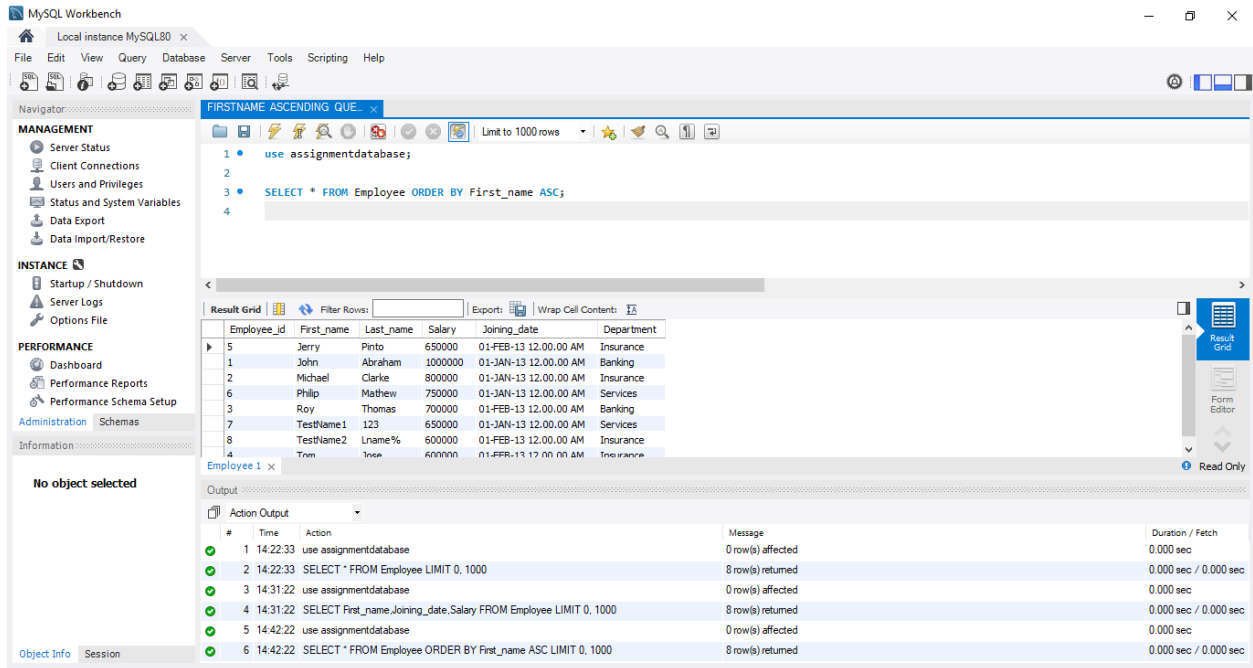
First_name	Joining_date	Salary
John	01-JAN-13 12.00.00 AM	1000000
Michael	01-JAN-13 12.00.00 AM	800000
Roy	01-FEB-13 12.00.00 AM	700000
Tom	01-FEB-13 12.00.00 AM	600000
Jerry	01-FEB-13 12.00.00 AM	650000
Philip	01-JAN-13 12.00.00 AM	750000
TestName1	01-JAN-13 12.00.00 AM	650000
TestName2	01-FEB-13 12.00.00 AM	600000

The output pane shows the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
1	14:22:33	use assignmentdatabase	0 row(s) affected	0.000 sec
2	14:22:33	SELECT * FROM Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
3	14:31:22	use assignmentdatabase	0 row(s) affected	0.000 sec
4	14:31:22	SELECT First_name,Joining_date,Salary FROM Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

c) Get all employee details from the employee table order by First Name Ascending and Salary descending?

Table1 Ascending:--



MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator: FIRSTNAME ASCENDING QUE...

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

Administration Schemas

Information

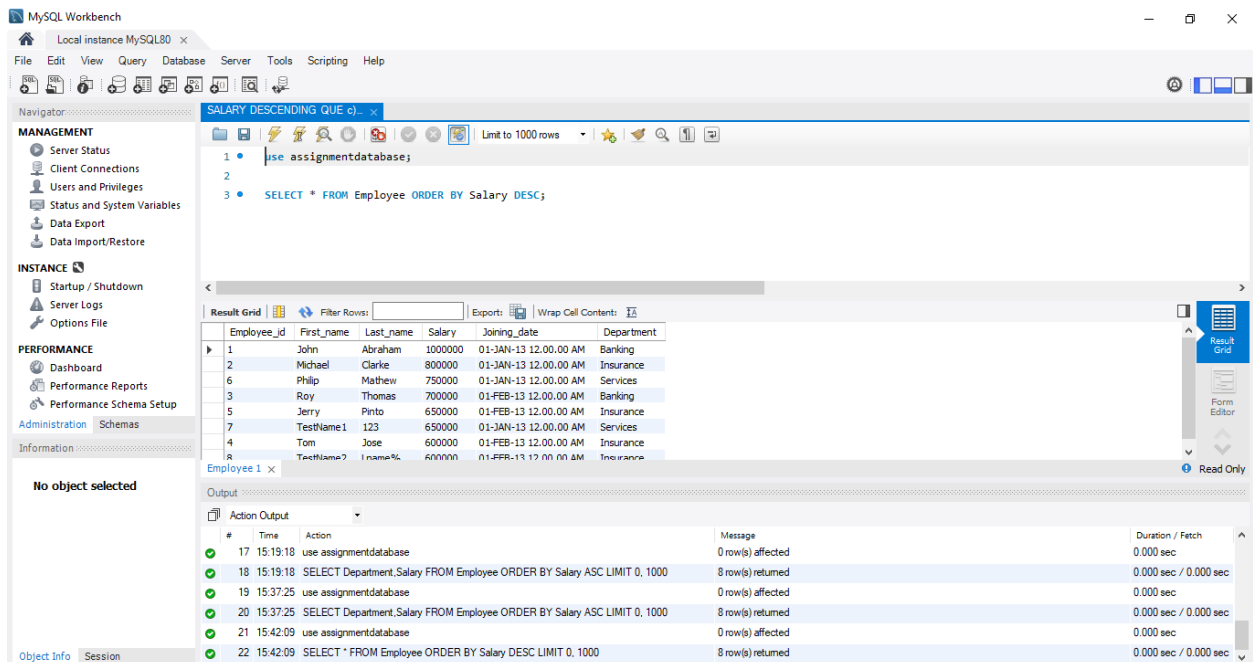
No object selected

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	14:22:33	use assignmentdatabase	0 row(s) affected	0.000 sec
2	14:22:33	SELECT * FROM Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
3	14:31:22	use assignmentdatabase	0 row(s) affected	0.000 sec
4	14:31:22	SELECT First_name,Joining_date,Salary FROM Employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
5	14:42:22	use assignmentdatabase	0 row(s) affected	0.000 sec
6	14:42:22	SELECT * FROM Employee ORDER BY First_name ASC LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

Table2 Descending: --



MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator: SALARY DESCENDING QUE c)...

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

Administration Schemas

Information

No object selected

Output

Action Output

#	Time	Action	Message	Duration / Fetch
17	15:19:18	use assignmentdatabase	0 row(s) affected	0.000 sec
18	15:19:18	SELECT Department,Salary FROM Employee ORDER BY Salary ASC LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
19	15:37:25	use assignmentdatabase	0 row(s) affected	0.000 sec
20	15:37:25	SELECT Department,Salary FROM Employee ORDER BY Salary ASC LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
21	15:42:09	use assignmentdatabase	0 row(s) affected	0.000 sec
22	15:42:09	SELECT * FROM Employee ORDER BY Salary DESC LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

d) Get employee details from employee table whose first name contains 'J'.

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

```
1 use assignmentdatabase;
2
3
4 SELECT *FROM Employee WHERE First_name LIKE 'J%';
5
6
7
```

The result grid displays the following data:

Employee_id	First_name	Last_name	Salary	Joining_date	Department
1	John	Abraham	100000	01-JAN-13 12:00:00 AM	Banking
5	Jerry	Pinto	650000	01-FEB-13 12:00:00 AM	Insurance

The Action Output pane shows the execution log, including the error message: "Error Code: 1054. Unknown column 'first\_name' in 'where clause'".

e) Get department wise maximum salary from employee table order by salary ascending?

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

```
1 use assignmentdatabase;
2
3 SELECT Department,Salary FROM Employee ORDER BY Salary ASC;
```

The result grid displays the following data:

Department	Salary
Insurance	600000
Insurance	600000
Insurance	650000
Services	650000
Banking	700000
Services	750000
Insurance	800000
Banking	1000000

The Action Output pane shows the execution log, including the error message: "Error Code: 1140. In aggregated query without GROUP BY, expression #1 of SELECT list co...".



f) Select first name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000

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

```
1 use assignmentdatabase;
2
3 SELECT Employee.First_name, Incentive.Incentive_amount FROM Employee INNER JOIN incentive
4 ON Employee.Employee_id=Incentive.Employee_ref_id WHERE Incentive.Incentive_amount>3000;
```

The query results are displayed in the 'Result Grid' tab, showing 4 rows:

First_name	Incentive_amount
John	4500
John	5000
Michael	3500
Roy	4000

The 'Output' tab shows the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
25	15:58:44	use assignmentdatabase	0 row(s) affected	0.000 sec
26	15:58:44	SELECT Employee.First_name, Incentive.Incentive_amount FROM Employee INNER JOIN in...	4 row(s) returned	0.000 sec / 0.000 sec
27	16:02:00	use assignmentdatabase	0 row(s) affected	0.000 sec
28	16:02:00	SELECT Employee.First_name, Incentive.Incentive_amount FROM Employee INNER JOIN in...	4 row(s) returned	0.000 sec / 0.000 sec
29	16:05:55	use assignmentdatabase	0 row(s) affected	0.000 sec
30	16:05:55	SELECT Employee.First_name, Incentive.Incentive_amount FROM Employee INNER JOIN in...	4 row(s) returned	0.000 sec / 0.000 sec

g) Create After Insert trigger on Employee table which insert records in view table

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

```
1 use assignmentdatabase;
2
3 DELIMITER //
4 CREATE trigger TR
5 after insert ON Employee
6 for each row
7 BEGIN
8 insert into view values(new.Employee_id,new.First_Name,new.Last_Name,new.Salary,new.joining_date,new.department);
9 END; //
```

The query results are displayed in the 'Output' tab, showing the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
27	16:02:00	use assignmentdatabase	0 row(s) affected	0.000 sec
28	16:02:00	SELECT Employee.First_name, Incentive.Incentive_amount FROM Employee INNER JOIN in...	4 row(s) returned	0.000 sec / 0.000 sec
29	16:05:55	use assignmentdatabase	0 row(s) affected	0.000 sec
30	16:05:55	SELECT Employee.First_name, Incentive.Incentive_amount FROM Employee INNER JOIN in...	4 row(s) returned	0.000 sec / 0.000 sec
31	16:22:16	use assignmentdatabase	0 row(s) affected	0.000 sec
32	16:22:16	CREATE trigger TR after insert ON Employee for each row BEGIN insert into view values(h...	0 row(s) affected	0.032 sec