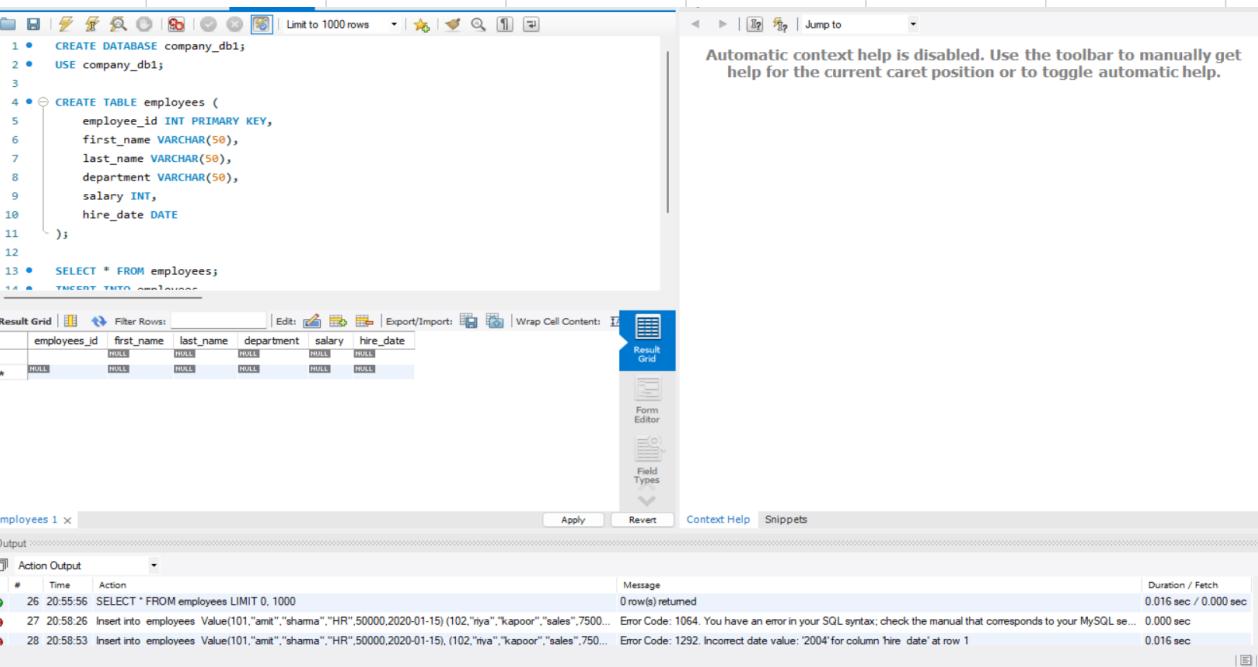


QUESTION 1	Create a New Database and Table for Employees Task: Create a new database named and Create a table named with the following columns:																												
ANSWER	 <p>The screenshot shows the MySQL Workbench interface. In the top-left pane, there is a code editor with the following SQL script:</p> <pre> 1 • CREATE DATABASE company_db1; 2 • USE company_db1; 3 4 • CREATE TABLE employees (5 employee_id INT PRIMARY KEY, 6 first_name VARCHAR(50), 7 last_name VARCHAR(50), 8 department VARCHAR(50), 9 salary INT, 10 hire_date DATE 11); 12 13 • SELECT * FROM employees; 14 ▲ INSERT INTO employees </pre> <p>The top-right pane displays a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."</p> <p>In the center, there is a "Result Grid" showing the structure of the "employees" table:</p> <table border="1"> <thead> <tr> <th>employees_id</th> <th>first_name</th> <th>last_name</th> <th>department</th> <th>salary</th> <th>hire_date</th> </tr> </thead> <tbody> <tr> <td>NULL</td> <td>NULL</td> <td>NULL</td> <td>NULL</td> <td>NULL</td> <td>NULL</td> </tr> </tbody> </table> <p>Below the grid, the "Output" pane shows the execution log:</p> <ul style="list-style-type: none"> Action Output: <table border="1"> <thead> <tr> <th>Time</th> <th>Action</th> <th>Message</th> <th>Duration / Fetch</th> </tr> </thead> <tbody> <tr> <td>26 20:55:56</td> <td>SELECT * FROM employees LIMIT 0, 1000</td> <td>0 row(s) returned</td> <td>0.016 sec / 0.000 sec</td> </tr> <tr> <td>27 20:58:26</td> <td>Insert into employees Value(101,"amit","sharma","HR",50000,2020-01-15)</td> <td>Error Code: 1064. You have an error in your SQL syntax, check the manual that corresponds to your MySQL se... 0.000 sec</td> <td></td> </tr> <tr> <td>28 20:58:53</td> <td>(102,"nya","kapoor","sales",7500,2020-01-15), (102,"nya","kapoor","sales",7500,2020-01-15)</td> <td>Error Code: 1292. Incorrect date value: '2004' for column 'hire_date' at row 1 0.016 sec</td> <td></td> </tr> </tbody> </table> 	employees_id	first_name	last_name	department	salary	hire_date	NULL	NULL	NULL	NULL	NULL	NULL	Time	Action	Message	Duration / Fetch	26 20:55:56	SELECT * FROM employees LIMIT 0, 1000	0 row(s) returned	0.016 sec / 0.000 sec	27 20:58:26	Insert into employees Value(101,"amit","sharma","HR",50000,2020-01-15)	Error Code: 1064. You have an error in your SQL syntax, check the manual that corresponds to your MySQL se... 0.000 sec		28 20:58:53	(102,"nya","kapoor","sales",7500,2020-01-15), (102,"nya","kapoor","sales",7500,2020-01-15)	Error Code: 1292. Incorrect date value: '2004' for column 'hire_date' at row 1 0.016 sec	
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PROBLEM FACING - IN MY SIDE ,I HAVE RUN CODE IN SQL,BUT THE TABLE IS NOT SHOWING ,PLEASE HELP ME PARTICULAR SUBJECT

QUESTION 2	. Insert Data into Employees Table Task: Insert the following sample records into the employee table
ANSWER	PROBLEM FACING - IN MY SIDE ,I HAVE RUN CODE IN SQL,BUT THE TABLE IS NOT SHOWING ,PLEASE HELP ME PARTICULAR SUBJECT

QUESTION 3	Display All Employee Records Sorted by Salary (Lowest to Highest)					
	Hint: Use the order by clause on the salary column.					
ANSWER						

QUESTION 4		. Show Employees Sorted by Department (A-Z) and Salary (High → Low)					
ANSWER							

QUESTION 5	. List All Employees in the IT Department, Ordered by Hire Date (Newest First)
ANSWER	

QUESTION 6		. Create and Populate a Sales Table			
ANSWER		Task: Create a table sales to track sales data:			

QUESTION 7	Display All Sales Records Sorted by Amount (Highest → Lowest)					
	HINT USE ORDER BY AMOUNT DESC					
ANSWER						

QUESTION 8		Show All Sales Made by Customer "Aditi			
ANSWER		USE WHERE CUSTOMER NAME= ADITI			

QUESTION 9	What is the Difference Between a Primary Key and a Foreign Key?																																																																											
ANSWER	<table border="1"> <tr> <td>Primary Key</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>A Primary Key is a column (or combination of columns) that uniquely identifies each row in a table.</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Values must be UNIQUE</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Cannot contain NULL</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Only one Primary Key per table</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Ensures entity integrity</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Foreign Key</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>A Foreign Key is a column in one table that refers to the Primary Key of another table.</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Can contain duplicate values</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Can contain NULL (unless restricted)</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Multiple Foreign Keys allowed in a table</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Ensures referential integrity</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Primary Key → Identifies a row uniquely</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Foreign Key → Creates a relationship between tables</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Both work together to maintain data consistency and integrity</td> <td></td> <td></td> </tr> </table>	Primary Key						A Primary Key is a column (or combination of columns) that uniquely identifies each row in a table.					Values must be UNIQUE					Cannot contain NULL					Only one Primary Key per table					Ensures entity integrity						Foreign Key					A Foreign Key is a column in one table that refers to the Primary Key of another table.					Can contain duplicate values					Can contain NULL (unless restricted)					Multiple Foreign Keys allowed in a table					Ensures referential integrity					Primary Key → Identifies a row uniquely					Foreign Key → Creates a relationship between tables					Both work together to maintain data consistency and integrity		
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QUESTION 10	What Are Constraints in SQL and Why Are They Used?
ANSWER	Constraints in SQL are rules applied to table columns to control the type, range, and integrity of data stored in a database. They ensure that invalid, duplicate, or inconsistent data cannot be inserted into a table
	Why Are Constraints Used?
	Maintain data integrity (correct and meaningful data)
	Prevent invalid data entry
	Enforce business rules
	Ensure relationships between tables
	Reduce errors at the database level