

Shri Ramdeobaba College of Engineering & Management Nagpur-13

Department of Computer Application

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Submission for

Course Name: Database Management Systems Lab

Course Code: MCP545

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Class Roll No: 26

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Shift: 2

Batch: 2

Under the Guidance of

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List of Experiments

1. Implementation of DDL commands of SQL with suitable examples
 - a) Create table b) Alter table c) Truncate table d) Drop table

Implementation of DML commands of SQL with suitable examples

- a) Select b) Insert c) Update d) Delete
2. Study and implementation of different types of constraints.
3. Implementation of different types of operators in SQL
 - a) Arithmetic Operators b) Logical Operators
 - c) Comparison Operators d) Set Operators
4. Study and Implementation of
 - a) Aggregate functions
 - b) Group By & Having clause
 - c) Order by clause
5. Study and Implementation of different types of joins like cross join, natural join, inner join, and outer joins.
6. Study and Implementation of Sub queries
7. Study and Implementation of views, and synonyms.
8. Study and Implementation of PL/SQL.

Practical 4

Aim: Study and Implementation of

- a) Aggregate functions
- b) Group By & Having clause
- c) Order by clause

Table: Furniture

FCODE	NAME	MATERIAL	PRICE	MANUFDATE	WCODE
1002	Coffee Chair	Wood	3000	19-NOV-2017	W01
1003	Dining table	Wood	20500	12-JAN-2019	W02
1004	Coffee Table	Glass	5000	06-JAN-2019	W02
1005	Chair	Wood	2500	07-MAY-2017	W01
1006	Recliner	Fibre	12000	31-MAR-2018	W03

Solution:

1. Find the maximum, minimum, and total price.

Query: SELECT MAX(price), MIN(price), SUM(price) FROM Furniture;

Output:

Results	Explain	Describe	Saved SQL	History
MAX(PRICE)		MIN(PRICE)		SUM(PRICE)
20500		2500		43000
1 rows returned in 0.00 seconds Download				

2. Find the total number of furniture.

Query: SELECT COUNT(fcode) FROM Furniture;

Output:

Results	Explain	Describe	Saved SQL	History
COUNT(FCODE)				
5				
1 rows returned in 0.00 seconds Download				

3. List the total price for each material.

Query: SELECT material, SUM(price) FROM Furniture GROUP BY (material);

Output:

Results	Explain	Describe	Saved SQL	History
MATERIAL			SUM(PRICE)	
Glass			5000	
Wood			26000	
Fibre			12000	
3 rows returned in 0.01 seconds Download				

4. Give maximum price for wood.

Query: SELECT material, MAX(price) FROM Furniture GROUP BY (material)
HAVING material='Wood';

Output:

Results	Explain	Describe	Saved SQL	History
MATERIAL		MAX(PRICE)		
Wood		20500		
1 rows returned in 0.01 seconds		Download		

5. Display the average price of each material.

Query: SELECT material, AVG(price) AS "Average Price" FROM Furniture
GROUP BY (material);

Output:

[illegible]

6. List fcode and the amount of all furniture in ascending order of price.

Query: SELECT fcode, price FROM Furniture ORDER BY price ASC;

Output:

Results	Explain	Describe	Saved SQL	History
FCODE		PRICE		
1005		2500		
1002		3000		
1004		5000		
1006		12000		
1003		20500		
5 rows returned in 0.01 seconds				
Download				

7. List the materials having a sum of price more than 10000.

Query: SELECT material, SUM(price) FROM Furniture GROUP BY (material)
HAVING SUM(price)>10000;

Output:

Results

Explain

Describe

Saved SQL

History

MATERIAL	SUM(PRICE)
Wood	26000
Fibre	12000

2 rows returned in 0.01 seconds

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8. Give the name of furniture whose number of wcode is less than 2.

Query: SELECT name FROM Furniture
WHERE wcode IN (
SELECT wcode FROM Furniture GROUP BY wcode
HAVING COUNT(wcode) < 2
);

Output:

Results	Explain	Describe	Saved SQL	History
NAME				
Recliner				
1 rows returned in 0.00 seconds Download				

9. Give the name of materials whose average price is greater than 15000.

Query: SELECT material, AVG(price) FROM Furniture GROUP BY (material)
HAVING AVG(price)>15000;

Output: No data found.

10. Give the name of materials whose total price is less than 6000.

Query: SELECT material, SUM(price) FROM Furniture GROUP BY (material)
HAVING SUM(price)<6000;

Output:

Results

Explain

Describe

Saved SQL

History

MATERIAL	SUM(PRICE)
Glass	5000

1 rows returned in 0.01 seconds

Download

11. Display the name of the furnitures in descending order of manufacturing date.

Query: SELECT name FROM Furniture ORDER BY manufdate DESC;

Output:

Results	Explain	Describe	Saved SQL	History
NAME				
Dining table				
Coffee Table				
Recliner				
Coffee Chair				
Chair				
5 rows returned in 0.01 seconds Download				