

SQL Class → 3

Amazon.com

Orders

Group By

Q1) Total sales
for city wise?

Output

city	total sales
LKO	450
DEL	770
BLR	180

item	amount	date	city
A	100	21/01/24	LKO
B	200	21/01/24	DEL
C	150	21/01/24	LKO
D	220	22/01/24	DEL
E	100	22/01/24	DEL
F	180	23/01/24	BLR
G	200	23/01/24	LKO
H	250	23/01/24	DEL

Input

Group By <col 1, col 2>

Answer 01

Select

From Orders

Group By City

Only Group by columns

2

And any column which is
not the part of groupBy Key
then that column can be
used with aggregation
function.

city	sale	date	item
LKO	100	—	A
LKO	150	—	B
LKO	200	—	C
DEL	200	—	—
DEL	100	—	—

Select
City,
item

Country	State	Date	Amount	Item
USA	Ohio	21/1/24	100	
IN	U.P	21/1/24	200	
IN	U.P	22/1/24	300	
USA	Ohio	21/1/24	400	
USA	Texas	22/1/24	500	

groups

Select

from Order

Group By Country, State

USA, Ohio

USA, Texas

IN, U.P

Select

?

from OrderID

group By Country, State, date

USA, Ohio, 21/1/24

USA, Texas, 22/1/24

IN, U.P, 21/1/24

IN, U.P, 22/1/24

Employee

Q) Give us
all such
department
where total
Salary of
employees >= 15000

emp	Dept	Salary
A	HR	10000
B	Finance	8000
C	HR	5000
D	IT	20000
E	Finance	5000

Select Dept, sum(Salary)
from Employee

Select

Dept,
sum(Salary)

From Employee
Group By Dept

) temp

where total_salary >= 15000

Correct Output

dept	total_sal
HR	15000
Finance	13000
IT	2000

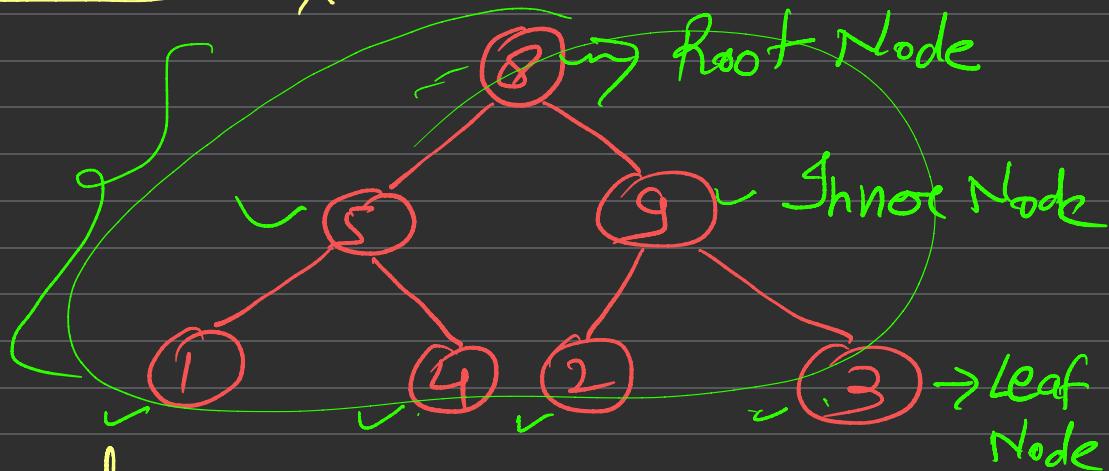
desired output
10 Rows

1M

(1M - 10 Rows) Unwanted
with Having Clause

Select
dept,
sum(Salary) as total_salary
From employee
Group By dept Having Sum(Salary) >= 5K

Über Inorder Question



Input
GTable

Node	Parent
5	8
4	5
1	5
3	9
8	Null
2	9
9	8

Output

Node	Type
5	Inner
4	Leaf
1	Leaf
3	Leaf
8	Root
2	Leaf
9	Inner

Select
Node,

Case

when node not in (Select distinct Parent from source
then 'Leaf') when Parent is not null
when Parent is null then 'Root'
else 'Inner'

Join

emp_id	name	dept_id	dept_id	id	department
1	A	101		101	HR
2	B	102		102	Finance
3	C	101		103	IT
4	D	103			
5	E	102			
6	F	101			

employee

Join

=

join

department

Q) Give me total count of employees working in each department?

dept_id, count

101	,	3
102	,	2
103	,	1

dept_id, count

HR	,	3
Finance	,	2
IT	,	1

Self Join

emp

emp_id	emp_name	mgr_id
1	A	2
2	B	3
3	C	Null
4	D	2
5	E	3

select

f1.*,
f2.*

From employee f1
Inner join employee f2



Employee ↘

Manager ↘

id	emp-name	mgr-id
1	A	3
2	B	3
3	C	4
4	D	
5	E	2

id	emp-name	mgr-id
1	A	3
2	B	3
3	C	4
4	D	
5	E	2

Select

employee.id,
employee.name,
manager.name as manager_name
From Employee Employee
Inner join Manager Manager
On Employee.manager_id = Manager.id