Group - 3_13
Tiles Industry Database Project
Queries (Select Queries)
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Q1] What is the average price of tiles in a particular region or country ?

Ans : select city, avg(prod_rate) as avg_prod_price

from branch natural join product natural join order_detail

group by city;

Q2] Which tile category have the highest selling in a given time period from 2022-01-01 to 2022-04-30 ?

Ans : select prod_id, prod_name, category, sum(prod_qty) as total_selling

from product natural join order_detail natural join order_table

where ord_date >= '2022-01-01' and ord_date <= '2022-04-30'

group by prod_id

order by total_selling desc limit 1;

Q3] What type of tiles is the least popular among customers ?

<u>Ans :</u> select category, sum(prod_qty) as total_selling

from product natural join order_detail natural join order_table

group by category

order by total_selling asc limit 1;

Q4] Which top 5 tile category are currently trending in the market ?

<u>Ans :</u> select category, sum(prod_qty) as total_selling

from product natural join order_detail natural join order_table

where ord_date >= '2022-04-01'

group by category

order by total_selling desc limit 5;

Q5] Which regions have the highest demand for Floor Tiles?

<u>Ans :</u> select city, pincode, state, country, sum(prod_qty) as total_selling

from customer natural join order_table natural join order_detail

natural join product

where category = 'Floor Tiles'

group by city, pincode, state, country

order by total_selling desc limit 1;

Q6] Which tile are most popular for kitchen use ?

Ans : select prod_id, prod_name, category, sum(prod_qty) as total_selling

from order_table natural join order_detail natural join product

where purpose = 'Kitchen tile purchase'

group by prod_id, prod_name, category

order by total_selling desc limit 1;

Q7] What are the most common sizes of tiles used in commercial

flooring applications ?

Ans : select prod_id, prod_name, category, size, sum(prod_qty) as total_selling

from order_detail natural join product

where category = 'Floor Tile'

group by prod_id, prod_name, category, size

order by total_selling desc;

Q8] Which 5 tiles are most profitable ?

Ans : select prod_id, prod_name, category, size, (avg(prod_rate) - saleprice)

as profit_per_tile

from order_detail natural join product

group by prod_id, prod_name, category, size, saleprice

having (avg(prod_rate) > saleprice)

order by profit_per_tile desc limit 5;

Q9] Which 3 Raw_Materials are commonly used ?

Ans : select rm_name, count(prod_id) as total_prod_made_by

from Used_Raw_Material natural join Raw_Material

group by rm_name

order by count(prod_id) desc limit 3;

Q10] How much Raw_Materials are purchased in last 3 month of year

2022 ?

Ans : select rm_name, sum(rm_qty) as total_rm_qty

from raw_mat_bill natural join purchase_detail natural join raw_material

where rm_bill_date >= '2022-10-01'

group by rm_name;

Q11] From which supplier we purchase the maximum quantity of

Raw_Material and which Raw_Material ?

Ans : select sup_no, sup_name, rm_name, sum(rm_qty) as total_rm_qty

from supplier natural join raw_mat_bill natural join purchase_detail

natural join raw_material

group by sup_no, rm_name

order by total_rm_qty desc limit 1;

Q12] Write a query to find the total profit of each branch, including the branch name and city.

Ans : select branch_no, branch_name, city,

sum(prod_rate*prod_qty - saleprice*prod_qty) as profit_per_branch

from order_table natural join order_detail natural join product

natural join branch

group by branch_no, branch_name, city

order by profit_per_branch desc;

Q13] List all employees who have a salary greater than the average salary of their department.

Ans : select e.emp_id, e.emp_name, e.salary, ed.avg_dep_salary,

ed.dep_name, ed.branch_no

from employee as e natural join

(select dep_no, dep_name, branch_no, avg(salary) as avg_dep_salary

from employee natural join department

group by dep_no, dep_name, branch_no) as ed

where e.salary > ed.avg_dep_salary

Q14] Retrieve the branch_name and total number of employees working In each branch and total employee cost of each branch.

Ans : select b.branch_no, b.branch_name, count(e.emp_id) as total_employee,

sum(e.salary) as total_employee_cost

from employee as e join department as d on e.dep_no=d.dep_no join

branch as b on d.branch_no=b.branch_no

group by b.branch_no

Q15] **How much stock of each Raw_Material currently present in each branch ? and also retrieve the id and name of Raw_Material**

Ans : select bs.branch_no, bs.branch_name, rm.rm_id,

rm.rm_name, bs.total_rm_stock

from (select branch_no, branch_name, rm_stc_id, sum(rm_stc_qty)

as total_rm_stock

from branch natural join raw_mat_stock natural join raw_material

group by branch_no, rm_stc_id) as bs

join raw_material as rm on bs.rm_stc_id=rm.rm_id

order by bs.branch_no asc

Q16] **For all customers retrieve the total amount(payment) that we get in last year.**

Ans : select cus_no, cus_name, sum(prod_rate*prod_qty) total_payment

from customer natural join order_table natural join order_detail

where ord_date >= '2022-01-01' and ord_date <= '2022-12-31'

group by cus_no

order by total_payment desc;

Q17] For each category how many products are currently available ?

Ans : select category, count(prod_stc_id) as total_avai_type,

sum(prod_stc_qty) as total_avai_qty

from product p join prod_stock ps on p.prod_id=ps.prod_stc_id

group by category

order by total_avai_qty desc;

Q18] In last year which top 10 days we have maximum selling ?

Ans : select bill_date, sum(prod_qty*prod_rate) as total_one_day_selling

from order_bill natural join order_table natural join order_detail

group by bill_date

order by total_one_day_selling desc limit 10;

Q19] Retrieve top 5 the city in which we have maximum customers.

Ans : select city, count(cus_no) as total_cus

from customer

group by city

order by total_cus desc limit 5;

Q20] For each department in each brach find the employee who have
Maximum salary ?

Ans : select distinct e.emp_id, e.emp_name, e.salary, e.dep_no

from employee as e join

(select dep_no, max(salary) as dep_max_salary

from employee natural join department

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group by dep_no) as dms on e.dep_no=dms.dep_no

where e.salary=dms.dep_max_salary

order by dep_no asc;
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