INTERMEDIATE PROBLEMS:

— 1. Print details of shipments (sales) where amounts are > 2,000 and boxes are <100?

select \* from sales where amount > 2000 and boxes < 100;

— 2. How many shipments (sales) each of the sales persons had in the month of January 2022?

select p.Salesperson, count(\*) as ‘Shipment Count’

from sales s

join people p on s.spid = p.spid

where SaleDate between ‘2022-1-1’ and ‘2022-1-31’

group by p.Salesperson;

— 3. Which product sells more boxes? Milk Bars or Eclairs?

select pr.product, sum(boxes) as ‘Total Boxes’

from sales s

join products pr on s.pid = pr.pid

where pr.Product in (‘Milk Bars’, ‘Eclairs’)

group by pr.product;

— 4. Which product sold more boxes in the first 7 days of February 2022? Milk Bars or Eclairs?

select pr.product, sum(boxes) as ‘Total Boxes’

from sales s

join products pr on s.pid = pr.pid

where pr.Product in (‘Milk Bars’, ‘Eclairs’)

and s.saledate between ‘2022-2-1’ and ‘2022-2-7’

group by pr.product;

— 5. Which shipments had under 100 customers & under 100 boxes? Did any of them occur on Wednesday?

select \* from sales

where customers < 100 and boxes < 100;

select \*,

case when weekday(saledate)=2 then ‘Wednesday Shipment’

else ”

end as ‘W Shipment’

from sales

where customers < 100 and boxes < 100;

HARD PROBLEMS:

— What are the names of salespersons who had at least one shipment (sale) in the first 7 days of January 2022?

select distinct p.Salesperson

from sales s

join people p on p.spid = s.SPID

where s.SaleDate between ‘2022-01-01’ and ‘2022-01-07’;

— Which salespersons did not make any shipments in the first 7 days of January 2022?

select p.salesperson

from people p

where p.spid not in

(select distinct s.spid from sales s where s.SaleDate between ‘2022-01-01’ and ‘2022-01-07’);

— How many times we shipped more than 1,000 boxes in each month?

select year(saledate) ‘Year’, month(saledate) ‘Month’, count(\*) ‘Times we shipped 1k boxes’

from sales

where boxes>1000

group by year(saledate), month(saledate)

order by year(saledate), month(saledate);

— Did we ship at least one box of ‘After Nines’ to ‘New Zealand’ on all the months?

set @product\_name = ‘After Nines’;

set @country\_name = ‘New Zealand’;

select year(saledate) ‘Year’, month(saledate) ‘Month’,

if(sum(boxes)>1, ‘Yes’,’No’) ‘Status’

from sales s

join products pr on pr.PID = s.PID

join geo g on g.GeoID=s.GeoID

where pr.Product = @product\_name and g.Geo = @country\_name

group by year(saledate), month(saledate)

order by year(saledate), month(saledate);

— India or Australia? Who buys more chocolate boxes on a monthly basis?

select year(saledate) ‘Year’, month(saledate) ‘Month’,

sum(CASE WHEN g.geo=’India’ = 1 THEN boxes ELSE 0 END) ‘India Boxes’,

sum(CASE WHEN g.geo=’Australia’ = 1 THEN boxes ELSE 0 END) ‘Australia Boxes’

from sales s

join geo g on g.GeoID=s.GeoID

group by year(saledate), month(saledate)

order by year(saledate), month(saledate)