**Name : Aniket Mourya**

**Id. No. 2020H1120298P**

**Q1. Select the number of sales per category and country.**

SELECT CategoryName, ShipCountry, COUNT(Orders.OrderID) as [No. of Sales]

FROM ((Orders inner join [Order Details] ON Orders.OrderID = [Order Details].OrderID) inner join Products ON [Order Details].ProductID = Products.ProductID) inner join Categories ON Products.CategoryID = Categories.CategoryID

GROUP BY ShipCountry,CategoryName;

**Q2. Select the 3 top-selling categories overall (hint: use “select top 3” construction).**

SELECT TOP 3 CategoryName, ShipCountry, COUNT(Orders.OrderID) as [No. of Sales]

FROM ((Orders inner join [Order Details] ON Orders.OrderID = [Order Details].OrderID) inner join Products ON [Order Details].ProductID = Products.ProductID) inner join Categories ON Products.CategoryID = Categories.CategoryID

GROUP BY ShipCountry,CategoryName;

**Q3. List the total amount of sales in $ by employee and year (discount in OrderDetails is at UnitPrice level). Which employees have an increase in sales over the three reported years?**

a) SELECT Employees.EmployeeID, SUM(UnitPrice\*Quantity\*(1-Discount)) as [total amount], YEAR(Orders.OrderDate) as [Year] FROM ([Order Details] inner join Orders ON [Order Details].OrderID = Orders.OrderID) inner join

Employees ON Employees.EmployeeID = Orders.EmployeeID GROUP BY Employees.EmployeeID, YEAR(Orders.OrderDate);

b) with new\_table([total amount],EmployeeID,[Year]) as (SELECT

SUM(UnitPrice\*Quantity\*(1-Discount)) as [total amount] ,Employees.EmployeeID, YEAR(Orders.OrderDate) as [Year] FROM ([Order Details] inner join Orders ON [Order Details].OrderID = Orders.OrderID) inner join Employees ON Employees.EmployeeID = Orders.EmployeeID GROUP BY Employees.EmployeeID, YEAR(Orders.OrderDate)) SELECT t1.EmployeeID FROM new\_table as t1,new\_table as t2, new\_table as t3 where t1.EmployeeID = t2.EmployeeID and t2.EmployeeID = t3.EmployeeID and t1.[Year] <

t2.[Year] and t2.[Year] < t3.[Year] and t3.[total amount] > t2.[total amount] and t2.[total amount] > t1.[total amount];

**Q4. Get an individual sales report by month for employee 9 (Dodsworth) in 1997.**

SELECT COUNT(Orders.OrderID) as [No. of Sales], MONTH(OrderDate) as Month

FROM Orders inner join Employees on Orders.EmployeeID = Employees.EmployeeID

WHERE YEAR(OrderDate) = 1997 AND Employees.EmployeeID = 9

GROUP BY MONTH(OrderDate);

**Q5. Get a sales report by country and month.**

SELECT COUNT(Orders.OrderID) as [No. of Sales], MONTH(OrderDate) as Month, ShipCountry as Country FROM Orders GROUP BY ShipCountry, MONTH(OrderDate);