**ST1501 CA2 Group Task**

**Class: DAAA/FT/2A/01**

**Group No: 4**

**Group Members: Cody, Joaquin, Rachel, SongLing**

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**Group Task**

Data Warehouse Schema

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Queries explanation

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| Query | Explanation | SQL script |
| 1 |  | SELECT f.product\_id, p.product\_name AS 'Product Name', ROUND(SUM(f.sales), 2) AS 'Total Sales', ROUND(SUM(f.profit), 2) AS 'Total Profit', SUM(f.quantity) AS Quantity, CONCAT(CAST(AVG(f.discount)\*100 AS INT),'%') AS 'Average Discount'  FROM factTable f, productDim p  WHERE f.product\_id = p.product\_id  GROUP BY f.product\_id, p.product\_name  ORDER BY [Total Profit] DESC; |
| 2 |  | SELECT (s.first\_name + ' '+ s.last\_name) 'Staff Name', ROUND(SUM(f.sales \* f.discount), 2) 'Total Sales', f.store\_id 'Store Code'  FROM factTable f, staffDim s  WHERE f.staff\_id = s.staff\_id  GROUP BY (s.first\_name + ' '+ s.last\_name), f.store\_id  ORDER BY [Total Sales] DESC; |
| 3 |  | SELECT SUM(f.sales) AS 'Total Sales',t.Year, t.WeekOfYear AS 'Week Of Year', t.MonthName AS 'Month'  FROM factTable f, timeDim t  WHERE f.time\_id = t.time\_id  GROUP BY t.Year, t.WeekOfYear, t.MonthName  ORDER BY [Total Sales] DESC; |
| 4 |  | SELECT (c.first\_name + ' '+ c.last\_name) 'Customer Name', ROUND(SUM(f.sales \* f.discount), 2) 'Total Sales', COUNT(f.order\_id) 'Quantity of Items Bought', c.[state] 'State', c.city 'City'  FROM factTable f, customerDim c  WHERE f.customer\_id = c.customer\_id  GROUP BY (c.first\_name + ' '+ c.last\_name), c.[state], c.city  ORDER BY [Total Sales] DESC, c.[state], c.city; |
| 5 |  | SELECT [Category Name], [Brand Name], [Product Name], [Quantity Sold], Stock, [Total Sales], [Total Profit] FROM  (SELECT c.category\_name AS 'Category Name', b.brand\_name AS 'Brand Name', p.product\_name AS 'Product Name', SUM(f.quantity) AS 'Quantity Sold', p.stock AS Stock, ROUND(SUM(f.sales), 2) AS 'Total Sales', ROUND(SUM(f.profit), 2) AS 'Total Profit', RANK() OVER (PARTITION BY c.category\_name ORDER BY ROUND(SUM(f.sales), 2) DESC) AS [Ranking]  FROM factTable f, categoryDim c, brandDim b, productDim p  WHERE f.product\_id = p.product\_id AND p.category\_id = c.category\_id AND p.brand\_id = b.brand\_id  GROUP BY c.category\_name, b.brand\_name, p.product\_name, p.stock) AS ranktable  WHERE ranking = 1  ORDER BY [Total Sales] DESC; |