**Ninjacart – Analytics – SQL Assignment**

Please find below the structure of tables which will be used in the assignment below

**Sale order: Saleorder Details:**

|  |  |
| --- | --- |
| **Field** | **Type** |
| id | int(10) unsigned |
| CustomerId | int(10) unsigned |
| CityId | int(10) unsigned |
| FacilityId | int(10) unsigned |
| DeliveryDate | date |
| Deleted | tinyint(1) |

|  |  |
| --- | --- |
| **Field** | **Type** |
| id | int(10) unsigned |
| SaleOrderId | int(10) unsigned |
| SkuId | int(10) unsigned |
| SalePrice | double |
| PurchasePrice | double |
| SkuQuantity | double |
| WeightId | int(10) unsigned |
| Deleted | tinyint(1) |

**Customer:**

|  |  |
| --- | --- |
| **Field** | **Type** |
| id | int(10) unsigned |
| Name | varchar(255) |
| CityId | int(10) unsigned |
| RelationshipManager | int(10) unsigned |
| LocalityId | int(10) unsigned |
| Deleted | tinyint(1) |

**Locality:** **SKU:**

|  |  |
| --- | --- |
| **Field** | **Type** |
| id | int(10) unsigned |
| Name | varchar(255) |

|  |  |
| --- | --- |
| **Field** | **Type** |
| Id | int(10) unsigned |
| Name | varchar(255) |

**Questions:**

1. Write a query to display number of orders placed by customer in the last two weeks. Kindly use deleted = 0 for all tables as default condition
2. Query to list down top 5 sku’s in terms of revenue yield in the last 7 days (Kindly use deleted = 0 for all tables as default condition)
3. Query to list down the first order date and last order date of the customer with Ninjacart. Kindly use deleted = 0 for all tables as default condition)
4. Query to list down the number of orders placed by relationship manager in the last 7 days (output should be in the below format)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RelationshipManager | T\_7 | T\_6 | T\_5 | T\_4 | T\_3 | T\_2 | T\_1 | T |
| Rahul | 10 | 9 | 8 | 6 | 0 | 17 | 12 | 11 |
| Dinesh | 12 | 3 | 2 | 4 | 5 | 11 | 8 | 6 |

1. Query to list SKU wise number of orders placed on a given day Kindly use deleted = 0 for all tables as default condition)
2. Query to list down the number of customers under each city, each locality Kindly use deleted = 0 for all tables as default condition)
3. Query to list down top 5 customers in terms of volume purchased in last week. Use only kg factor (weighted = 1)

Answers :

1. SELECT S1.CUSTOMERID,

COUNT(S2.SALESORDERID)

S3.NAME

FROM SALEORDER S1

INNER JOIN SALEORDERDETAILS S2

ON S1.ID = S2.ID

INNER JOIN CUSTOMER S3

ON S3.ID = S1.ID

WHERE S3.DELETED = 0

GROUP BY S1.CUSTOMERID

AND

DATE(S1.DELIVERYDATE) > (CURDATE() – INTERVAL 14 DAY);

2)

SELECT TOP 5 S1.NAME,

(S2.SALEPRICE \* S2.QUANTITY) AS REVENUE

FROM SKU S1

INNER JOIN SALEORDERDETAILS S2 ON S1.ID = S2.ID

WHERE S2.DELETED = 0

AND DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 7 DAY) ORDER BY REVENUE;

3)

SELECT S1.ID,S2.NAME,MAX(S1.DELIVERYDATE) AS FIRST,

MIN(S1.DELIVERYDATE) AS LAST

FROM SALEORDER S1

INNER JOIN CUSTOMER S2 ON S1.ID = S2.ID

WHERE S1.DELETED = 0

GROUP BY S2.NAME;

4)

SELECT RELATIONSHIP MANAGER,

COUNT(CASE WHERE CURDATE()-1 = DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 1 DAY ) THEN SALEORDERID END) AS T\_7,

COUNT(CASE WHERE CURDATE()-2 = DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 2 DAY ) THEN SALEORDERID END) AS T\_6,

COUNT(CASE WHERE CURDATE()-3 = DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 3 DAY ) THEN SALEORDERID END) AS T\_5,

COUNT(CASE WHERE CURDATE()-4 = DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 4 DAY ) THEN SALEORDERID END) AS T\_4

COUNT(CASE WHERE CURDATE()-5 = DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 5 DAY ) THEN SALEORDERID END) AS T\_3

COUNT(CASE WHERE CURDATE()-6 = DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 1 DAY ) THEN SALEORDERID END) AS T\_2

COUNT(CASE WHERE CURDATE()-7 = DATE(CUSTOMER.DELIVERYDATE) > (CURDATE() – INTERVAL 1 DAY ) THEN SALEORDERID END) AS T\_1

FROM(SELECT C1.NAME AS RELATIONSHIPMANAGER

C3.SALESORDERID AS SALESORDERID

FROM CUSTOMER C1

INNER JOIN CUSTOMER C2 ON C1.RELATIONSHIPMANAGER = C2.ID

INNER JOIN SALEORDERDETAILS C3 ON

C1.ID = C3.ID

WHERE C3.DELETED = 0);

5)

SELECT DAY(S1.DELIVERYDATE) AS GIV\_DAY,

COUNT(S2.SALEORDERID)

S3.ID

FROM SALEORDER S1

INNER JOIN SALERORDERDETAILS S2

ON S1.ID = S2.ID

INNER JOIN SKU S3 ON S1.ID = S3.ID

WHERE S1.DELETED = 0

GROUP BY GIV\_DAY ORDER BY 3.ID;

6)

SELECT COUNT(C1.CUSTOMERID),C2.ID,C3.NAME

FROM SALE ORDER C1

INNER JOIN CUSTOMER C2 ON C1.ID = C2.ID

INNER JOIN LOCALITY C3 ON C3.ID = C2.LOCALITYID

WHERE C2.DELETED = 0 GROUP BY C3.NAME;

7)

SELECT TOP 5 C1.NAME,MAX(C2.SKUQUANTITY)

FROM CUSTOMER C1

INNER JOIN SALEORDERDETAILS C2

ON C1.ID = C2.ID

WHERE C2.WEIGHTED = 1

AND

DATE(DELIVERYDATE) > (CURDATE() – INTERVAL 7 DAY)

GROUP BY C1.NAME ORDER BY C2.SKUQUANTITY;