SQL QUERIES FOR THE GIVEN DATASET

The Data model is described below. The data questions listed should be querying the three tables Listed below:

Table A – "Dim_Centres"

Region	*Centre_Id*	*Centre_Name*
North	N01	Manta
North	N02	Vaross
East	E01	Mavaka
East	E02	Bragow
East	E03	Ralo
South	S01	Verton
South	S01	Cosa
West	W01	Sleedburg

Table B – "Map_Centre_Cust" – a customer can only be assigned to 1 centre

Centre_Id	*Cust_Id*
N01	1
N01	2
N02	3
E01	4
S01	5
S02	6
W01	7
W01	8

Table C – "Fact_Centre_Txn"

Centre_Id	*Cust_Id*	*Visit_Date*	*Transaction_Id*	*Closing_Balance*
N01	1	01/06/2017 09:00	N0100001	100
N01	1	01/06/2017 10:00	N0100002	200
N01	1	01/06/2017 14:30	N0100003	175
N01	1	02/06/2017 11:00	N0100005	105
S02	6	01/06/2017 10:30	S0200001	90
W01	8	03/06/2017 15:00	W0100001	250

SQL QUESTIONS with Queries in Answer

```
--Q1:Display the last 100 customers who visited any bank centre and the date of
--their last visit.SQ


 SELECT cust_id AS CustomerID,
     MAX(visit_date) AS VisitDate from
  Fact_Centre_Txn FCT GROUP BY cust_id Order BY visit_date DESC
LIMIT 100;


--Q2 Q2: For each customer, display the number of transactions in the bank over the
--last 60 days.

SELECT cust_id AS CustomerId, COUNT(transactions) AS CountofTransactions
FROM Fact_Centre_Txn FCT
WHERE visit_date between DATE_SUB(NOW(), INTERVAL 60 DAY) AND NOW()
GROUP BY Cust_id ;


--Q3 Produce a list of members who visited the bank more than once in a specific
--day and show the details of all transactions done in that day.


With t3 (SELECT cust_id,visit_date,COUNT(Transaction_ID)
                    FROM Fact_Centre_Txn FCT
                    GROUP BY cust_id,visit_date
                    having COUNT(Transaction_id) >1)
SELECT cust_id AS Customer_id,visit_date AS Visitdate,Transaction_Id
FROM t3;

--Q4:Display the amount of money kept at each bank centre per day for the
--current month.
SELECT centre_id,visit_date, SUM(Closing_Balance) AS TotalBalance
                    WHERE DATE_PART('month',visit_date) = DATE_PART('month',GET_DATE()
                    GROUP BY centre_id,visit_date)


--Q5:List all bank centres and the number of customers assigned to the centre. In
--the same output, display the percentage of each centre's customers with respect
--to its region.
--First cte Find Customer Count Region wise
--Second cte Find Customer Count centre wise
--Main Query joining two ctes find percentage
```

```
with region_cust as (select d.Region, count(c.Cust_Id) as region_customer
from dim_centres d inner join Map_Centre_Cust c on d.Centre_Id = c.Centre_Id
group by d.Region),
with center_cust as (select d.Region, c.Centre_Id. count(c.Cust_id) as center_customer
                                                    from dim_centres d inner join Map_Centre_Cust c on
d.Centre_Id = c.Centre_Id group by d.Region, c.Centre_Id)
select rc.Region, cc.Centre_Id, cc.center_customer, (cc.center_cusomter/rc.region_customer) * 100
from region_cust rc inner join center_cust cc on rc.Region = cc.Region
```