

Question 1:

Write SQL code in a word document that will answer the questions below using the following two tables.

- **Find the latest StoreStock for each StoreCode, ProductCode pair**

WITH LatestInventory AS (

SELECT

StoreCode,

ProductCode,

MAX(Date) AS LatestDate

FROM

Inventory

GROUP BY

StoreCode, ProductCode

)

SELECT

i.StoreCode,

i.ProductCode,

i.StoreStock,

i.Date

FROM

Inventory i

JOIN LatestInventory

ON

i.StoreCode = LatestInventory.StoreCode

AND i.ProductCode = LatestInventory.ProductCode

AND i.Date = LatestInventory.LatestDate;

- **Sum sales by BuildingType**

```
SELECT
    S.BuildingType,
    SUM(I.SalesRevenue) AS TotalSales
FROM
    Inventory I
JOIN
    Store S
ON
    I.StoreCode = S.StoreCode
GROUP BY
    S.BuildingType;
```

- **List stores description which have sales revenue lower than 50TL in 2014 May**

```
SELECT
    S.StoreDescription,
    SUM(I.SalesRevenue) AS TotalSales
FROM
    Inventory I
JOIN
    Store S
ON
    I.StoreCode = S.StoreCode
WHERE
    I.Date BETWEEN '2014-05-01' AND '2014-05-31'
GROUP BY
    S.StoreDescription
HAVING
    SUM(I.SalesRevenue) < 50;
```

- **In February 2014, what is the difference between the highest-selling store and the least-selling store?**

WITH FebruarySales AS (

SELECT

StoreCode,

SUM(COALESCE(SalesRevenue, 0)) AS TotalSales

FROM

Inventory

WHERE

Date BETWEEN '2014-02-01' AND '2014-02-28'

GROUP BY

StoreCode

),

FebruarySaleswAllStores AS (

SELECT s.*, COALESCE(f.TotalSales, 0) AS TotalSales FROM Store s

LEFT JOIN FebruarySales f

ON f.StoreCode = s.StoreCode)

SELECT

MAX(TotalSales) - MIN(TotalSales) AS SalesDifference

FROM

FebruarySaleswAllStores;