ASSIGNMENT 5

1. **Write a query to show the following data when StartDate and EndDate is passed as input parameter.**
*   **Accounting Date**
*   **Day**
*   **Week**
*   **Month**
*   **Quarter**

Example: When 1/1/2021 is passed as StartDate and 6/1/2021 is passed as EndDate as input parameter, the query should return all of the above data between that date range.

AccountingDate	Day	Week	Month	Quarter
1/1/2022	Friday	1	January	1
1/2/2022				
1/3/2022				
6/1/2022	Sunday	23	June	2

Ans:

DECLARE @StartDate DATE = '2021-01-01';
DECLARE @EndDate DATE = '2021-01-06';

WITH DATERANGE AS(
    SELECT @StartDate as DATE
    UNION ALL --combines the result of two or more select queries
    SELECT DATEADD(day, 1, DATE)

```
        FROM DateRange
        WHERE DATEADD(day, 1, Date)<=@endDate
)


Select Date,
DATENAME(weekday, Date) AS DayName,
DATEPART(week, Date) AS WeekNumber,
DATENAME(month, Date) AS MonthName,
DATEPART(quarter, Date) AS QuarterNumber
from DateRange;
```

2. Write a query to find the list of all the available rooms on the given dates.

```
DECLARE @StartDate DATE = '2023-06-01';
DECLARE @EndDate DATE = '2023-06-08';
select r.RoomNumber from room as r
LEFT JOIN Booking b ON r.RoomId = b.RoomId
WHERE @StartDate < b.ArrivalDate and @EndDate> b.DepartureDate
```

3. **Create the following SPs**

a. **SP to create transactions for bookings made per room and services taken from the hotel (I.e., food, refreshments, casino charge, etc.)**

b. **SP to generate invoices for that customer when we pass customerId.**

Each SPs must have Transaction commit/rollback concept with try/catch and the parameter used should be JSON.

Sample JSON for 1 a)

{

"customerId":1,

"roomIds":"1,2,3"

"from":"06-01-2023"

"to":"06-03-2023"

}

Sample JSON for 1 b)

{

"customerIds":"1,2"

}

(using dynamic sql; pending)