

## 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 = '2021-01-01';

select r.RoomNumber from room as r
LEFT JOIN Booking b ON r.RoomId = b.RoomId
WHERE b.RoomId IS NULL OR b.DepartureDate < @StartDate
```

**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)**