Assignment - DB03

Employee Master Table: t_emp

Emp_id(PK)	Emp_Code	Emp_f_name	Emp_m_name	Emp_l_name	Emp_DOB	Emp_DOJ
1001	OPT20110105	Manmohan		Singh	10-02-1983	25-05-2010
1003	OPT20100915	Alfred	Joseph	Lawrence	28-02-1988	26-02-2012

DOB: Date of birth, DOJ: Date of Joining

Note:

1. No employee should have age less than 18 years.
2. **Emp_db_id** should have auto incremented values incremented by 2 and started by 1001.
3. **Emp_id**, **Emp_f_name** and **Emp_DOJ** are mandatory fields.

Activity Table: t_activity

Activity_id(PK)	Activity_description
1	Code Analysis
2	Lunch
3	Coding
4	Knowledge Transition
5	Database

Attendance Table: t_atten_det

Atten_id	Emp_id(FK)	Activity_id(FK)	Atten_start _datetime	Atten_end_hrs
1001	1001	5	2/13/2011 10:00:00	2
1002	1001	1	1/14/2011 10:00:00	3
1003	1001	3	1/14/2011 13:00:00	5
1004	1003	5	2/16/2011 10:00:00	8
1005	1003	5	2/17/2011 10:00:00	8
1006	1003	5	2/19/2011 10:00:00	7

Atten_id should have auto incremented values incremented by 1 and started by 1001.

Salary Table: t_salary

Salary_id	Emp_Id	Changed_date	New_Salary
1001	1003	2/16/2011	20000.00
1002	1003	1/05/2011	25000.00
1003	1001	2/16/2011	26000.00

Note: For any date column, you may choose any suitable format.

Create tables as described above and enter some data which can be used in upcoming questions.
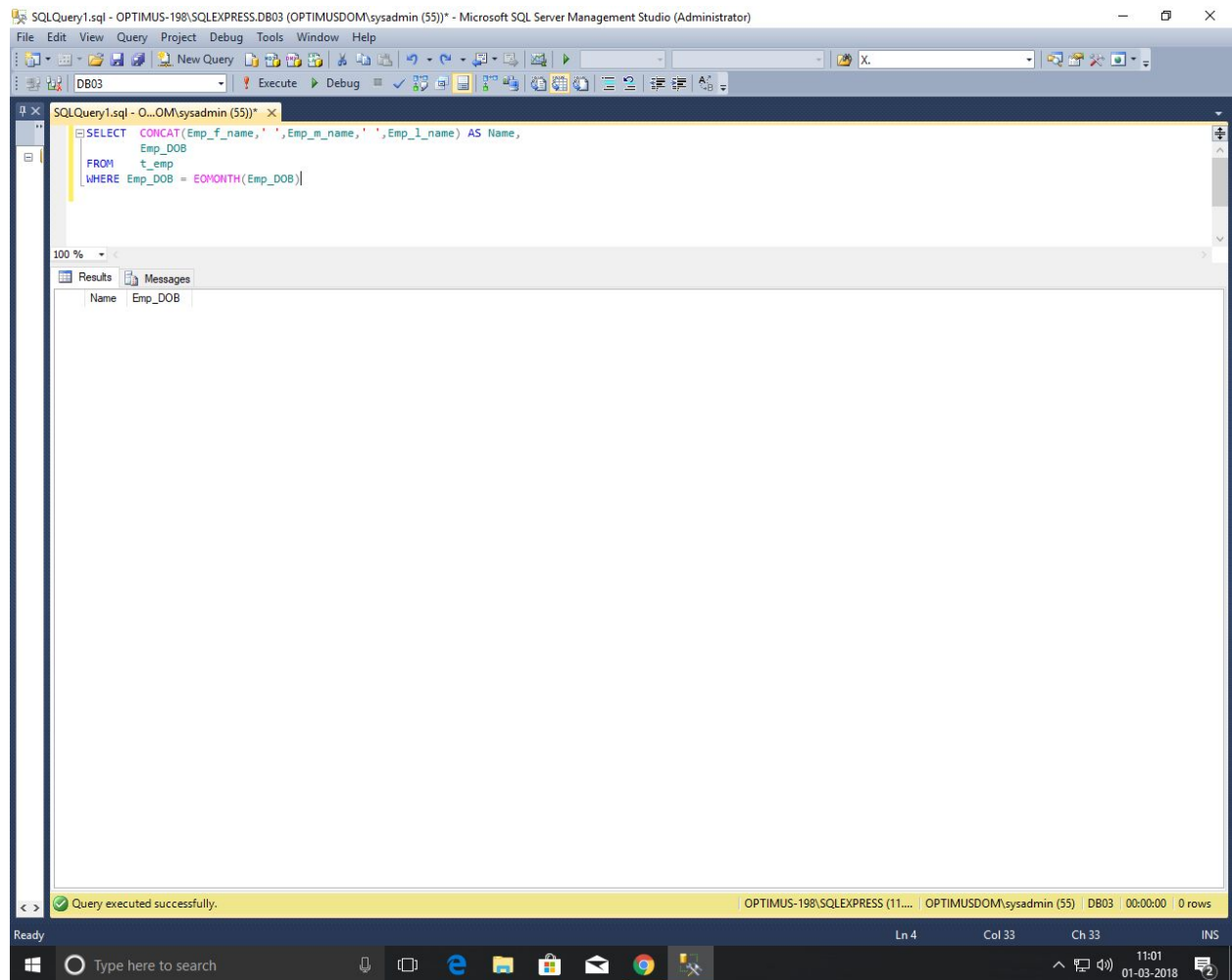
Q 1) Write single SQL queries for each of followings:

a. Display full name and date of birth those employees whose birth date falls in the last day of any month.

Name	Date Of Birth
Alfred Joseph Lawrence	28-02-1988

b. Display employee full name, got increment in salary?, previous salary, current salary, total worked hours , last worked activity and hours worked in that.

Q1

A

Q1

B


```sql
SELECT SALARY.EMP_ID,SALARY.NAME,
        SALARY.[TOTAL WORKED HOURS],
        IIF(MATCH.[PREVIOUS SALARY] = MATCH.[CURRENT SALARY], 'NO', 'YES')AS GOT_INCREMENT,
        MATCH.[PREVIOUS SALARY],
        MATCH.[CURRENT SALARY],
        TACTIVITY.ACTIVITY_DESCRIPTION AS [LAST WORKED ACTIVITY],
        AD.ATTEN_END_HRS AS [HOURS WORKED ]
FROM T_ATTEN_DET AD
INNER JOIN
    (
    SELECT A.EMP_ID,
        E.EMP_F_NAME + ' ' + COALESCE(E.EMP_M_NAME,'') + ' ' + COALESCE(E.EMP_L_NAME,'') AS NAME,
        SUM(A.ATTEN_END_HRS) AS [TOTAL WORKED HOURS],
        MAX(A.ATTEN_START_DATETIME) AS [LAST WORKED ACTIVITY]
    FROM T_EMP E
    INNER JOIN T_ATTEN_DET A
    ON
    E.EMP_ID = A.EMP_ID
    INNER JOIN T_ACTIVITY AC
    ON A.ACTIVITY_ID = AC.ACTIVITY_ID
    GROUP BY E.EMP_F_NAME + ' ' + COALESCE(E.EMP_M_NAME,'') + ' ' + COALESCE(E.EMP_L_NAME,''), A.EMP_ID
    )SALARY
ON AD.ATTEN_START_DATETIME = SALARY.[LAST WORKED ACTIVITY]
INNER JOIN T_ACTIVITY TACTIVITY
ON
AD.ACTIVITY_ID = TACTIVITY.ACTIVITY_ID
INNER JOIN
(
SELECT T1.EMP_ID,
        T1.NEW_SALARY AS [PREVIOUS SALARY],
        T2.NEW_SALARY AS [CURRENT SALARY]
FROM T_SALARY T1
INNER JOIN T_SALARY T2
ON
T1.EMP_ID = T2.EMP_ID AND T1.CHANGED_DATE < T2.CHANGED_DATE
) MATCH
ON
SALARY.EMP_ID = MATCH.EMP_ID
```

EMP_ID	NAME	TOTAL WORKED HOURS	GOT_INCREMENT	PREVIOUS SALARY	CURRENT SALARY	LAST WORKED ACTIVITY	HOURS WORKED
1003	Alfred Joseph Lawrence	23	YES	25000	20000	Database	7