**Date Function**

1) Find the date difference between the hire\_date and resignation\_date for all the employees. Display in no. of days, months and year(1 year 3 months 5 days).

Emp\_ID Hire\_Date Resignation\_Date

1      1/1/2000   7/10/2013

select concat(datediff(year,'1/1/2000','7/10/2013'),' year',

datediff(month,'1/1/2000','7/10/2013')%12,'months',

datediff(day,'1/1/2000','7/10/2013')%31,'days')

2      4/12/2003  3/8/2017

select concat(datediff(year,'4/12/2003','3/8/2017'),' Year ',

datediff(month,'4/12/2003','3/8/2017')%12,'Months ',

datediff(day,'4/12/2003','3/8/2017 ')%30,'Days')

3      22/9/2012  21/6/2015

select concat(datediff(year,'22/9/2012','21/6/2015'),' Year ',

datediff(month,'22/9/2012','21/6/2015')%12,'Months ',

datediff(day,'22/9/2012','21/6/2015 ')%31,'Days')

4      13/4/2015  NULL

select concat(datediff(year,'13/4/2015',NULL),' year',

datediff(month,'13/04/2015',NULL)%12,'months',

datediff(day,'13/04/2015',NULL)%31,'days')

5      3/06/2016  NULL

select concat(datediff(year,'3/4/2015',NULL),' year',

datediff(month,'13/04/2015',NULL)%12,'months',

(datediff(day,'13/04/2015',NULL)%365)%31,'days')

6      08/08/2017 NULL

select concat(datediff(year,'08/08/2017',NULL),' year',

datediff(month,'08/08/2017',NULL)%12,'months',

datediff(day,'08/08/2017',NULL)%31,'days')

7      13/11/2016 NULL

select concat(datediff(year,'08/08/2017',NULL),' year',

datediff(month,'08/08/2017',NULL)%12,'months',

datediff(day,'08/08/2017',NULL)%31,'days')

2) Format the hire\_date as  mm/dd/yyyy(09/22/2003) and  resignation\_date as mon dd, yyyy(Aug 12th, 2004). Display the null as (DEC, 01th 1900)

select CONCAT(format(cast('01/01/2000' as date),'MMMM/dd/yyyy'),' ',

FORMAT(CAST('07/12/2004' AS DATE),'MMM,dd,yyyy'))

3) Calcuate experience of the employee till date in Years and months(example 1 year and 3 months)

select concat(datediff(year,'1/1/2000','7/10/2013'),'year ',

datediff(month,'1/1/2000','7/10/2013')%12, 'months')

Use Getdate() as input date for the below three questions.

4) Display the count of days in the previous quarter

select datediff(

day,

dateadd(quarter,-1,getdate())-

day(getdate()+1) ,

dateadd(month,3,dateadd(quarter,-1,getdate())-

day(getdate()+1) ))

5) Fetch the previous Quarter's second week's first day's date

select dateadd(quarter,-1,getdate()) -day(getdate())+14

6) Fetch the financial year's 15th week's dates (Format: Mon DD YYYY)

select format(dateadd (day,0,dateadd(week,15,concat('04-01',-year(getdate())))),'MMM dd yyyy'),

format(dateadd (day,1,dateadd(week,15,concat('04-01',-year(getdate())))),'MMM dd yyyy'),

format(dateadd (day,2,dateadd(week,15,concat('04-01',-year(getdate())))),'MMM dd yyyy'),

format(dateadd (day,3,dateadd(week,15,concat('04-01',-year(getdate())))),'MMM dd yyyy'),

format(dateadd (day,4,dateadd(week,15,concat('04-01',-year(getdate())))),'MMM dd yyyy'),

format(dateadd (day,5,dateadd(week,15,concat('04-01',-year(getdate())))),'MMM dd yyyy'),

format(dateadd (day,6,dateadd(week,15,concat('04-01',-year(getdate())))),'MMM dd yyyy')

7) Find out the date that corresponds to the last Saturday of January, 2015 using with clause.

Use Airport database for the below two question:

8) Find the number of days elapsed between first and last flights of a passenger.

SELECT [trip\_no],datediff(day,cast([time\_out] as datetime),

cast([time\_in] as datetime))

FROM [Airport].[Trip]

9) Find the total duration in minutes and in seconds of the flight from Rostov to Moscow.

select (datediff(minute,[time\_out],[time\_in])\*60+datediff(second,[time\_out],[time\_in]))as

total\_duriation from [Airport].[Trip]

where [town\_from]='Rostov' and [town\_to]='Moscow'