

Builtin Functions in SQL

1. GETDATE()

GETDATE() is very common used method which returns exact date time from the system. It does not accept any parameter. Just call it like simple function.

```
Declare @Date datetime
set @Date = (SELECT GETDATE());
Print @Date
```

Output : Aug 15 2009 9:04PM

2. DATEADD()

DATEADD() is used to add or subtract datetime. Its return a new datetime based on the added or subtracted interval.

General Syntax: DATEADD(datepart, number, date)

datepart is the parameter that specifies on which part of the date to return a new value. Number parameter is used to increment datepart.

```
Declare @Date datetime
set @Date = (SELECT GETDATE());
print @Date -- Print Current Date
-- Adding 5 days with Current Date
SELECT DATEADD(day, 5,@Date ) AS NewTime
```

Output : Aug 15 2009 9:19PM

NewTime

2009-08-20 21:19:15.170

3. DATEPART()

DATEPART() is used when we need a part of date or time from a datetime variable. We can use DATEPART() method only with select command.

Syntax : DATEPART(datepart, date)

```
-- Get Only Year
SELECT DATEPART(year, GETDATE()) AS 'Year'
-- Get Only Monthj
SELECT DATEPART(month, GETDATE()) AS 'Month'
-- Get Only hour
SELECT DATEPART(hour, GETDATE()) AS 'Hour'
```

Output : Year

2009

Month

8

Hour

21

4. DATEDIFF()

DATEDIFF() is very common function to find out the difference between two DateTime elements.

Syntax: DATEDIFF(datepart, startdate, enddate)

```
-- Declare Two DateTime Variable
Declare @Date1 datetime
Declare @Date2 datetime
-- Set @Date1 with Current Date
set @Date1 = (SELECT GETDATE());
-- Set @Date2 with 5 days more than @Date1
set @Date2 = (SELECT DATEADD(day, 5, @Date1 ))
-- Get The Date Difference
SELECT DATEDIFF(day, @Date1, @Date2) AS DifferenceOfDay
```

Output: DifferenceOfDay

5. DATENAME()

DATENAME() is very common and most useful function to find out the date name from the datetime value.(dw=day, day=date, year=year, month=month)

```
-- Get Today
SELECT DATENAME(dw, getdate()) AS 'Today Is'
-- Get Mont name
SELECT DATENAME(month, getdate()) AS 'Month'
```

Output : Today Is

Saturday

Month

August

6. DAY()

DAY() is used to get the day from any date time object.

```
SELECT DAY(getdate()) AS 'DAY'
```

Output: DAY ----- 15

7. MONTH()

```
SELECT MONTH(getdate()) AS 'Month'
```

Output: Month ----- 8

8. YEAR()

```
SELECT YEAR(getdate()) AS 'Year'
```

Output : Year

-----2009

