Date and Time Function

--getdate

select getdate() as Todays\_date-- Todays date

select getdate() -1 as Yesterday\_date --Yesterday date

select getdate() +1 as Tomorrow\_date --Tomorrow date

select getdate() +2

--There are three diffrent functions in SQL to modify or perform any date related task

--1.DATEDIFF()

--2.DATEPART()

--3.DATEADD()

--1.datediff() function

--The datediff function requires 3 argument(s).

--If we provide more than 3 arguments then it will through an exception

--(YY,MM,DD,HH,Minutes and seconds)

select DATEDIFF(YYYY,'1987/09/13','2021/09/13')

select DATEDIFF(HH,getdate(),GETDATE()+2)

--syntax : DATEDIFF(interval,date1,date2)

--interval

--Year,YYYY, YY = Year

--Quarter,QQ, Q = Quarter

--Month - MM, M = Month

--DAYOFYEAR - day of the year

--DAY,dy,y = day

--WEEK,WW,WK = weekday

--HOUR,HH = hour

--MINUTE,MI,N = Minute

--SECOND,SS,S = Second

--MILISECOND , MS = Millisecond

select datediff(MINUTE,'2015/01/01','2021/08/01')

--Q.HOW to calculate your age ?

select DATEDIFF(YY,'1992/08/15',getdate()) as Present\_Age

select DATEDIFF(YEAR,'MONTH',getdate()) as Present\_Age

Create table Account\_details (

ACCT\_NUMBER int primary key identity(11112881,1),

ACCT\_NAME varchar(20),

ACCT\_OPEN\_DATE date,

BRANCH Varchar(20))

insert into Account\_details values ('Shubham','2015/12/09','MUMBAI')

insert into Account\_details values ('Rihan','2016/01/12','Jaipur')

insert into Account\_details values ('Sheetal','2017/08/11','GOA')

insert into Account\_details values ('Priyanka','2017/01/01','Chennai')

insert into Account\_details values ('Manik','2015/01/08','Agra')

insert into Account\_details values ('Veena','2021/01/01','Patna')

insert into Account\_details values ('Rohan','2019/07/01','Pune')

insert into Account\_details values ('Laxmi',GETDATE(),'rohatak')

insert into Account\_details values ('Jinal',GETDATE(),'Indore')

select \* from Account\_details

select ACCT\_NUMBER,ACCT\_NAME,ACCT\_OPEN\_DATE , DATEDIFF(MM,ACCT\_OPEN\_DATE,GETDATE()) as Ageofaccount from Account\_details

--Q.What is the age of your bank account

select ACCT\_NUMBER, ACCT\_NAME, DATEDIFF(YY,ACCT\_OPEN\_DATE,getdate()) as ACCOUNT\_AGE from Account\_details

--Q.Calculate the no of accounts which is opened during the current year.

--2.DATEPART

--This will allow you to display the date part

--Syntax : DATEPART(interval,date/column\_name)

select getdate()

select DATEPART(HH,GETDATE())

select \* from Account\_details

select \*,datepart(YY,ACCT\_OPEN\_DATE) as date from Account\_details where datepart(YY,ACCT\_OPEN\_DATE) =2021

select \* from Account\_details where ACCT\_OPEN\_DATE in ('2021')

--if we want to validate date related column which is in terms of timestamp

--and it is very difficult to mention each and every time stamp related column with every date

--in order to avoid that we can use date part so it will consider with mentioned interval.

select count(\*) from Account\_details where DATEPART(YY,ACCT\_OPEN\_DATE) in ('2021','2015')

select datepart(yy,getdate()) as years, datepart(MM,getdate()) as months --- yers and months

--3.DATEADD()

--it will allow you to add the dates.

--it will accept three arguments.

--syntax : DATEADD(interval,value,date/datecolumn)

select DATEADD(DD,30,GETDATE()) as after30days