Conversion Function in SQL

1. **CAST:** These functions convert an expression of one data type to another

   Condition:
   - We can not convert char data to int
   - We can convert int to char
   - We can convert DateTime to char
   - we can convert char to DateTime if the valid date is there.

Syntax: CAST (expression AS data_type [(length)])

Example: Select cast(CustomerKey as varchar(100))+' '+FirstName, * from Dimcustomer

Select 'My Name is ' + FirstName + ' ' + LastName+ ' and my Yearly income is ' + YearlyIncome As Details ,* from Dimcustomer

2. **Convert:** These functions convert an expression of one data type to another.

Syntax: CONVERT (data_type [(length)] , expression [, style])
Example: Select CONVERT(int,YearlyIncome),* from Dimcustomer
Select CONVERT(Varchar(100),CustomerKey)+ ' '+ FirstName, * from Dimcustomer

Select convert(varchar,BirthDate,111),BirthDate,* from Dimcustomer

Select getdate()

```
--Datetime Convertion formats Example
SELECT convert(varchar,getdate())    -- Mar 15 2018 10:35AM
SELECT convert(varchar,getdate(),0)  -- Mar 15 2018 10:35AM
SELECT convert(varchar,getdate(),1)  -- 03/15/18
SELECT convert(varchar,getdate(),2)  -- 18.03.15
SELECT convert(varchar,getdate(),3)  -- 15/03/18
SELECT convert(varchar,getdate(),4)  -- 15.03.18
SELECT convert(varchar,getdate(),5)  -- 15-03-18
SELECT convert(varchar,getdate(),6)  -- 15 Mar 18
SELECT convert(varchar,getdate(),7)  -- Mar 15, 18
SELECT convert(varchar,getdate(),8)  -- 10:39:39
```

```
SELECT convert(varchar,getdate(),9)  -- Mar 15 2018 10:39:48:373AM
SELECT convert(varchar,getdate(),10) -- 03-15-18
SELECT convert(varchar,getdate(),11) -- 18/03/15
SELECT convert(varchar,getdate(),15) -- 180315
SELECT convert(varchar,getdate(),13) -- 15 Mar 2018 10:41:07:590
SELECT convert(varchar,getdate(),14) -- 10:41:25:903
SELECT convert(varchar,getdate(),20) -- 2018-03-15 10:43:56
SELECT convert(varchar,getdate(),21) -- 2018-03-15 10:44:04.950
SELECT convert(varchar,getdate(),22) -- 03/15/18 10:44:50 AM
SELECT convert(varchar,getdate(),23) -- 2018-03-15
SELECT convert(varchar,getdate(),24) -- 10:45:45
SELECT convert(varchar,getdate(),25) -- 2018-03-15 10:46:11.263


SELECT convert(varchar, getdate(), 100) -- Oct 23 2016 10:22AM (or PM)
SELECT convert(varchar, getdate(), 101) -- 10/23/2016
SELECT convert(varchar, getdate(), 102) -- 2016.10.23
SELECT convert(varchar, getdate(), 103) -- 23/10/2016
SELECT convert(varchar, getdate(), 104) -- 23.10.2016
SELECT convert(varchar, getdate(), 105) -- 23-10-2016
SELECT convert(varchar, getdate(), 106) -- 23 Oct 2016
SELECT convert(varchar, getdate(), 107) -- Oct 23, 2016
SELECT convert(varchar, getdate(), 108) -- 09:10:34
SELECT convert(varchar, getdate(), 109) -- Oct 23 2016 11:10:33:993AM (or PM)
SELECT convert(varchar, getdate(), 110) -- 10-23-2016
SELECT convert(varchar, getdate(), 111) -- 2016/10/23
SELECT convert(varchar, getdate(), 112) -- 20161023
SELECT convert(varchar, getdate(), 113) -- 23 Oct 2016 06:10:55:383
SELECT convert(varchar, getdate(), 114) -- 06:10:55:383(24h)
SELECT convert(varchar, getdate(), 120) -- 2016-10-23 06:10:55(24h)
SELECT convert(varchar, getdate(), 121) -- 2016-10-23 06:10:55.383
SELECT convert(varchar, getdate(), 126) -- 2016-10-23T06:10:55.383
```

.