Conversion Function

In some cases, the Server uses data of one type where it expects data of a different data type. This can happen when the Server can automatically convert the data to the expected data type. This data type conversion can be done implicitly by the Server, or explicitly by the user.

1. Write a query to convert integer value 150 to character type data

   This can be achieved using CONVERT(). Syntax of CONVERT() as shown below
   Syntax:

   ```
   CONVERT(value, type)
   ```

   ```
   SELECT CONVERT(150, CHAR);
   ```

Output:

CONVERT(150, CHAR)
150

2. Query the year from hire date in character format
   Here year is present in first 4 character in hire date, to fetch that make use of CHAR() and pass number of characters to be fetched inside that

   ```
   SELECT
      CONVERT(hire_date, CHAR(4))
   FROM
      employee;
   ```

Output:

CONVERT(hire_date, CHAR(4))
2021

2020
2021
2021
2019
2018
2021
2021

3. Query the given string value '12-12-12' into time format

```sql
SELECT
CONVERT('12-12-12', TIME) as time;
```

Output:

time
00:00:12

Here it will consider first two values and will be treated as seconds

4. Convert the given string '14:12:14' into date format

```sql
SELECT CONVERT('14-12-14', DATE) as date;
```

Output:

date
2014-12-14

5. Convert the given string '70:12:12' into date format

```
SELECT CONVERT('70-12-12', DATE) as date;
```

Output:

date
1970-12-12

Here the year is 70. That is the reason it is considered as 19's means above 70 will be considered as 19's below 70 will be considered as 20's.

6. Convert the given string '14:12:12' into datetime format

```
SELECT CONVERT('14:12:14', DATETIME) as date_time;
```

Output:

date_time
2014-12-14 00:00:00

7. Extract time from '12:12:12 21:03:06'

```
SELECT CONVERT('12:12:12 21:03:06', TIME) as time;
```

Output:

time
21:03:06

CAST() Function:
The CAST() function converts a value (of any type) into a specified datatype.

Syntax:

```
CAST(expression AS datatype(length))
```

```
SELECT CAST(150 AS CHAR);
```

3

Output:

CAST(150 AS CHAR)
150

As you can see from the output here 150 is converted to character using cast().