

Project: Replace Null's

Name: Gaurav S. Tanpure

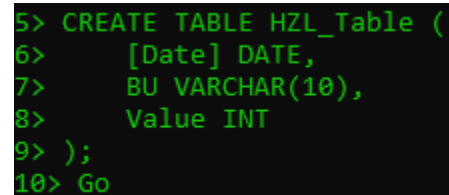
Domain: SQL

College: PCCOE

Step 1:

Create Table HZL_Table:

```
CREATE TABLE HZL_Table (  
    [Date] DATE,  
    BU VARCHAR(10),  
    Value INT  
);  
Go
```

A screenshot of a terminal window with a black background and green text. It shows the execution of the SQL command to create the HZL_Table. The prompt is 5>, and the command is CREATE TABLE HZL_Table ([Date] DATE, BU VARCHAR(10), Value INT); followed by a semicolon and the word Go. The prompt changes to 6> on the next line.

```
5> CREATE TABLE HZL_Table (  
6>     [Date] DATE,  
7>     BU VARCHAR(10),  
8>     Value INT  
9> );  
10> Go
```

Step 2:

Insert Data to it:

```
INSERT INTO HZL_Table VALUES  
(  
'2024-01-01', 'hzi', 3456),  
(  
'2024-02-01', 'hzi', NULL),  
(  
'2024-03-01', 'hzi', NULL),  
(  
'2024-04-01', 'hzi', NULL),  
(  
'2024-01-01', 'SC', 32456),  
(  
'2024-02-01', 'SC', NULL),  
(  
'2024-03-01', 'SC', NULL),  
(  
'2024-04-01', 'SC', NULL),  
(  
'2024-05-01', 'SC', 345),  
(  
'2024-06-01', 'SC', NULL);  
Go
```

```

1>
2> INSERT INTO HZL_Table VALUES
3> ('2024-01-01', 'hzi', 3456),
4> ('2024-02-01', 'hzi', NULL),
5> ('2024-03-01', 'hzi', NULL),
6> ('2024-04-01', 'hzi', NULL),
7> ('2024-01-01', 'SC', 32456),
8> ('2024-02-01', 'SC', NULL),
9> ('2024-03-01', 'SC', NULL),
10> ('2024-04-01', 'SC', NULL),
11> ('2024-05-01', 'SC', 345),
12> ('2024-06-01', 'SC', NULL);
13> Go

(10 rows affected)

```

Step 3:

Replace Null Values

```

WITH CTE AS (
    SELECT *,
        ROW_NUMBER() OVER (PARTITION BY BU ORDER BY [Date]) AS rn
    FROM HZL_Table
),
Filled AS (
    SELECT
        a.[Date],
        a.BU,
        ISNULL(a.Value, b.Value) AS Value
    FROM CTE a
    OUTER APPLY (
        SELECT TOP 1 Value
        FROM CTE
        WHERE BU = a.BU
        AND Value IS NOT NULL
        AND rn < a.rn
        ORDER BY rn DESC
    ) b
)
SELECT [Date], BU, Value
FROM Filled
ORDER BY BU, [Date];
Go

```

```

2>
3> WITH CTE AS (
4>     SELECT *,
5>         ROW_NUMBER() OVER (PARTITION BY BU ORDER BY [Date]) AS rn
6>     FROM HZL_Table
7> ),
8> Filled AS (
9>     SELECT
10>         a.[Date],
11>         a.BU,
12>         ISNULL(a.Value, b.Value) AS Value
13>     FROM CTE a
14>     OUTER APPLY (
15>         SELECT TOP 1 Value
16>         FROM CTE
17>         WHERE BU = a.BU
18>         AND Value IS NOT NULL
19>         AND rn < a.rn
20>         ORDER BY rn DESC
21>     ) b
22> )
23> SELECT [Date], BU, Value
24> FROM Filled
25> ORDER BY BU, [Date];
26> Go

```

Date	BU	Value
2024-01-01	hzl	3456
2024-02-01	hzl	3456
2024-03-01	hzl	3456
2024-04-01	hzl	3456
2024-01-01	SC	32456
2024-02-01	SC	32456
2024-03-01	SC	32456
2024-04-01	SC	32456
2024-05-01	SC	345
2024-06-01	SC	345

(10 rows affected)

```

1>

```