

Write a Pandas program to find and replace the missing values in a given DataFrame which do not have any valuable information

PROGRAM:

```
import pandas as pd

import numpy as np

# Create the given DataFrame

data = {

    'ord_no': [70001.0, np.nan, 70002.0, 70004.0, np.nan, 70005.0, np.nan,
70010.0, 70003.0, 70012.0, np.nan, 70013.0],

    'purch_amt': [150.50, 270.65, 65.26, 110.50, np.nan, 948.50, 2400.60,
5760.00, 1983.43, 2480.40, 250.45, 75.29, 3045.60, np.nan, np.nan],

    'ord_date': ['2012-10-05', '2012-09-10', '2012-08-17', '2012-09-10', '2012-07-
27', '2012-09-10', '2012-10-10', '2012-10-10', '2012-06-27', '2012-08-17',
'2012-04-25', np.nan, np.nan, np.nan, np.nan],

    'customer_id': [3002, 3001, 3001, 3003, 3002, 3001, 3001, 3004, 3003,
3002, 3001, 3001, 5002.0, 5003.0, 5001.0, np.nan, 5002.0, 5001.0, 5001.0,
np.nan, 5003.0, 5002.0, 5003.0, np.nan],

    'salesman_id': ['5002.0', '5003.0', '5001.0', np.nan, '5002.0', '5001.0',
'5001.0', np.nan, '5003.0', '5002.0', '5003.0', np.nan, np.nan, np.nan, np.nan],

}

# Ensure all arrays have the same length

max_length = max(len(v) for v in data.values())

data = {k: v + [np.nan] * (max_length - len(v)) for k, v in data.items()}

df = pd.DataFrame(data)

# Find and replace missing values with 'Unknown'

df.replace(np.nan, 'Unknown', inplace=True)

# Display the result

print(df)
```

## OUTPUT:

```
===== RESTART: C:/Users/PADMASRI/Documents/Codings/program 14.py
   ord_no purch_amt   ord_date customer_id salesman_id
0   70001.0    150.5  2012-10-05      3002.0      5002.0
1   Unknown    270.65  2012-09-10      3001.0      5003.0
2   70002.0     65.26  2012-08-17      3001.0      5001.0
3   70004.0    110.5  2012-09-10      3003.0      Unknown
4   Unknown   Unknown  2012-07-27      3002.0      5002.0
5   70005.0    948.5  2012-09-10      3001.0      5001.0
6   Unknown    2400.6  2012-10-10      3001.0      5001.0
7   70010.0    5760.0  2012-10-10      3004.0      Unknown
8   70003.0   1983.43  2012-06-27      3003.0      5003.0
9   70012.0    2480.4  2012-08-17      3002.0      5002.0
10  Unknown    250.45  2012-04-25      3001.0      5003.0
11  70013.0     75.29   Unknown      3001.0      Unknown
12  Unknown    3045.6   Unknown      5002.0      Unknown
13  Unknown   Unknown   Unknown      5003.0      Unknown
14  Unknown   Unknown   Unknown      5001.0      Unknown
15  Unknown   Unknown   Unknown   Unknown      Unknown
16  Unknown   Unknown   Unknown      5002.0      Unknown
17  Unknown   Unknown   Unknown      5001.0      Unknown
18  Unknown   Unknown   Unknown      5001.0      Unknown
19  Unknown   Unknown   Unknown   Unknown      Unknown
20  Unknown   Unknown   Unknown      5003.0      Unknown
21  Unknown   Unknown   Unknown      5002.0      Unknown
22  Unknown   Unknown   Unknown      5003.0      Unknown
23  Unknown   Unknown   Unknown   Unknown      Unknown
```