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How to perform an outer left join on multiple pandas Dataframes in Python

An outer left join is a method of combining two tables that have some shared information. It takes all of the rows in the leftmost or first table and checks to see if the information in one of its columns matches a column in the second table. If there is a match, the row in the second table is merged with the row from the first table. If there is no match, those empty column spaces are filled with a NaN value.

USE `pandas.merge()` TO PERFORM AN OUTER LEFT JOIN

Call `pandas.merge(left_df, right_df, how, on)` with `left_df` and `right_df` as the left and right `DataFrames`, `how` as `how=left` to specify a left join, and `on` as `on=column_names` where `column_names` is a list of one or multiple columns to be checked for equal values in each `DataFrame`. This returns a left outer joined table, which can be done repeatedly to join together more `DataFrames`.

```
print(left_df)
```

OUTPUT

| | fruit | count |
|---|--------|-------|
| 0 | apple | 1 |
| 1 | banana | 2 |
| 2 | orange | 3 |
| 3 | pear | 2 |
| 4 | melon | 1 |

```
print(right_df)
```

OUTPUT

| | fruit | price |
|---|------------|-------|
| 0 | banana | 2.75 |
| 1 | melon | 4.31 |
| 2 | orange | 1.35 |
| 3 | strawberry | 3.57 |

```
merged_df = pd.merge(left_df, right_df, how='left', on=['fru
```

```
print(merged_df)
```

OUTPUT

| | fruit | count | price |
|---|--------|-------|-------|
| 0 | apple | 1 | NaN |
| 1 | banana | 2 | 2.75 |
| 2 | orange | 3 | 1.35 |
| 3 | pear | 2 | NaN |
| 4 | melon | 1 | 4.31 |

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```
1 import os
2 import sys
3
4 def count_py_files_in_repos(dirname):
5     if os.path.exists(os.path.join(dirname, 'py_files')):
6         count = 0
7         for root, dirs, files in os.walk(os.path.join(dirname, 'py_files')):
8             count += len(files)
```

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