

# twinlab.join\_samples

**twinlab.join\_samples(df\_one, df\_two)**

Join two dataframes that contain independent samples generated by the `Emulator.sample()` method.

The output from the `Emulator.sample()` method is a multi-indexed dataframe where the first level of the index is the parameter name and the second level is the sample number. This convenience method allows you to join two dataframes that contain independent samples generated by the `Emulator.sample()` method together into a single dataframe.

## Parameters:

- **df\_one** (*pd.DataFrame*) – The first multi-indexed dataframe to join.
- **df\_two** (*pd.DataFrame*) – The second multi-indexed dataframe to join.

## Returns:

The joined dataframe

## Return type:

*pd.DataFrame*

## Example

```
df_y1 = emulator.sample(df_X, 1) # Create first set of samples
df_y2 = emulator.sample(df_X, 3) # Creates new independent samples
tl.join_samples(df_y1, df_y2)
```

|   | y        |          |          |          |
|---|----------|----------|----------|----------|
|   | 0        | 1        | 2        | 3        |
| 0 | 0.784193 | 1.308067 | 0.176582 | 0.875387 |
| 1 | 0.978259 | 1.039125 | 0.646922 | 0.887118 |
| 2 | 1.086855 | 0.942270 | 0.864730 | 0.934348 |

