

# pandas.DataFrame.round

`DataFrame.round(decimals=0, out=None)`

Round a DataFrame to a variable number of decimal places.

*New in version 0.17.0.*

**Parameters:**     **decimals** : *int, dict, Series*

Number of decimal places to round each column to. If an int is given, round each column to the same number of places. Otherwise dict and Series round to variable numbers of places. Column names should be in the keys if *decimals* is a dict-like, or in the index if *decimals* is a Series. Any columns not included in *decimals* will be left as is. Elements of *decimals* which are not columns of the input will be ignored.

**Returns:**             *DataFrame object*

## Examples

```
>>> df = pd.DataFrame(np.random.random([3, 3]),
...                    columns=['A', 'B', 'C'], index=['first', 'second', 'third'])
>>> df
           A         B         C
first  0.028208  0.992815  0.173891
second 0.038683  0.645646  0.577595
third   0.877076  0.149370  0.491027
>>> df.round(2)
           A         B         C
first   0.03   0.99   0.17
second  0.04   0.65   0.58
third   0.88   0.15   0.49
>>> df.round({'A': 1, 'C': 2})
           A         B         C
first   0.0   0.992815   0.17
second  0.0   0.645646   0.58
third   0.9   0.149370   0.49
>>> decimals = pd.Series([1, 0, 2], index=['A', 'B', 'C'])
>>> df.round(decimals)
           A  B         C
first   0.0  1   0.17
second  0.0  1   0.58
third   0.9  0   0.49
```