

# How do I convert an object to a float in Pandas?

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## RECOMMENDED CITATION

stats writer (2025). *How do I convert an object to a float in Pandas?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=101558>

In Pandas, you can convert an object to a float by using the `to_numeric` function with the argument 'coerce' and setting it to True. This will convert any non-numeric values to NaN and convert the object to a float. Alternatively, you can use the `astype` method and specify the desired data type to convert an object to a float.

You can use one of the following methods to convert a column in a pandas DataFrame from object to float:

#### Method 1: Use `astype()`

```
df = df.astype(float)
```

#### Method 2: Use `to_numeric()`

```
df = pd.to_numeric(df)
```

Both methods produce the same result.

The following examples show how to use each method with the following pandas DataFrame:

#### import pandas as pd

```
#create DataFrame
```

```
df = pd.DataFrame({'team': ,  
'points': ,  
'assists': })
```

```
#view DataFrame
```

```
print(df)
```

```
team points assists
```

```
0 A 18 5
```

```
1 B 22.2 7
```

```
2 C 19.1 7
```

```
3 D 14 9
```

```
4 E 14 12
```

```
5 F 11.5 9
```

```
6 G 20 9
```

```
7 H 28 4
```

```
#check data type of each column
```

```
print(df.dtypes)
```

```
team object
points object
assists int64
dtype: object
```

## Method 1: Use `astype()` to Convert Object to Float

The following code shows how to use the `astype()` function to convert the points column in the DataFrame from an object to a float:

```
#convert points column from object to float
df = df.astype(float)
```

```
#view updated DataFrame
print(df)
```

```
team points assists
0 A 18.0 5
1 B 22.2 7
2 C 19.1 7
3 D 14.0 9
4 E 14.0 12
5 F 11.5 9
6 G 20.0 9
7 H 28.0 4
```

```
#view updated data types
print(df.dtypes)
```

```
team object
points float64
assists int64
dtype: object
```

Notice that the points column now has a data type of `float64`.

## Method 2: Use `to_numeric()` to Convert Object to Float

The following code shows how to use the `to_numeric()` function to convert the points column in the DataFrame from an object to a float:

```
#convert points column from object to float
```

```
df = pd.to_numeric(df, errors='coerce')
```

```
#view updated DataFrame
```

```
print(df)
```

```
team points assists
```

```
0 A 18.0 5
```

```
1 B 22.2 7
```

```
2 C 19.1 7
```

```
3 D 14.0 9
```

```
4 E 14.0 12
```

```
5 F 11.5 9
```

```
6 G 20.0 9
```

```
7 H 28.0 4
```

```
#view updated data types
```

```
print(df.dtypes)
```

```
team object
```

```
points float64
```

```
assists int64
```

```
dtype: object
```

Notice that the points column now has a data type of **float64**.

Also note that this method produces the exact same result as the previous method.