

# How can I convert a JSON file into a Pandas DataFrame?

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## RECOMMENDED CITATION

stats writer (2024). *How can I convert a JSON file into a Pandas DataFrame?*.

PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=136403>

Converting a JSON file into a Pandas DataFrame is a simple process that allows for efficient data manipulation and analysis. A JSON file, which stands for JavaScript Object Notation, is a popular format for storing and transmitting data. To convert a JSON file into a Pandas DataFrame, first import the "pandas" library and use the "read\_json()" function to read the JSON file. This will create a Pandas DataFrame with the data from the JSON file. The DataFrame can then be manipulated and analyzed using various built-in functions and methods in the Pandas library. This process is useful for organizing and analyzing large amounts of data in a structured and efficient manner.

## Convert a JSON File to a Pandas DataFrame

Occasionally you may want to convert a JSON file into a pandas DataFrame. Fortunately this is easy to do using the pandas `read_json()` function, which uses the following syntax:

```
read_json('path', orient='index')
```

where:

**path:** the path to your JSON file.  
**orient:** the orientation of the JSON file. Default is 'index' but you can specify 'split', 'records', 'columns', or 'values' instead.

The following examples show how to use this function for a variety of different JSON strings.

**Example 1: Converting a JSON File with a "Records" Format**

**Suppose we have a JSON file called my\_file.json in the**

**following format:**

**We can load this JSON file into a pandas DataFrame by simply specifying the path to it along with orient='records' as follows:**

```
#load JSON file into pandas DataFrame  
df =  
pd.read_json('C:/Users/Zach/Desktop/json_file.json',  
orient='records')
```

```
#view DataFrame  
df
```

```
assists points
```

```
0 5 25
```

```
1 7 12
```

```
2 7 15
```

```
3 12 19
```

**Example 2: Converting a JSON File with an "Index" Format**

**Suppose we have a JSON file called my\_file.json in the following format:**

```
{
  "0": {
    "points": 25,
    "assists": 5
  },
  "1": {
    "points": 12,
    "assists": 7
  },
  "2": {
    "points": 15,
    "assists": 7
  },
  "3": {
    "points": 19,
    "assists": 12
  }
}
```

We can load this JSON file into a pandas DataFrame by simply specifying the path to it along with `orient='index'` as follows:

**#load JSON file into pandas DataFrame**

```
df = pd.read_json('C:/Users/Zach/Desktop/json_file.json', orient='index')
```

**#view DataFrame**

```
df
```

```
assists points
```

```
0 5 25
```

```
1 7 12
```

```
2 7 15
```

```
3 12 19
```

**Example 3: Converting a JSON File with a Columns" Format**

**Suppose we have a JSON file called my\_file.json in the following format:**

```
{  
  "points": {  
    "0": 25,  
    "1": 12,  
    "2": 15,  
    "3": 19  
  },  
}
```

```
"assists": {  
  "0": 5,  
  "1": 7,  
  "2": 7,  
  "3": 12  
}
```

We can load this JSON file into a pandas DataFrame by simply specifying the path to it along with `orient='columns'` as follows:

```
#load JSON file into pandas DataFrame  
df = pd.read_json('C:/Users/Zach/Desktop/json_file.json',  
orient='columns')  
  
#view DataFrame  
df  
  
assists points  
0 5 25  
1 7 12  
2 7 15
```

### 3 12 19

#### Example 4: Converting a JSON File with a "Values" Format

Suppose we have a JSON file called `my_file.json` in the following format:

```
[  
,  
,  
,  
]
```

We can load this JSON file into a pandas DataFrame by simply specifying the path to it along with `orient='values'` as follows:

```
#load JSON file into pandas DataFrame
```

```
df =  
pd.read_json('C:/Users/Zach/Desktop/json_file.json',  
orient='values')
```

```
#view DataFrame
```

```
df
```

```
0 1
```

0 25 5

1 12 7

2 15 7

3 19 12

3 12 19

*You can find the complete documentation for the `read_json()` function [here](#).*

**How to Read Excel Files with Pandas**

**How to Read CSV Files with Pandas**