

Working with JSON

We are nearly ready to get some useful results from the now-clean data. You'll soon see how to create a medals table. In preparation for the next Olympics game you may write many different scripts, each taking the clean data, and summarising and presenting it in different ways.

But first, let's save the clean data in a more reusable way. Otherwise we would have to split text lines back into year, discipline, country, medal type and number of medals at the start of every script. There is an easier way to store this data and re-use it later.

We will save what is in Python's memory, so we can easily come back to it later.

There are various ways to save and retrieve lists, dictionaries and other Python data. For instance, the often used Python's pickle module, which does have some security and other issues. Use it with care.

We will use JSON. The JSON format is very popular, especially for sending information over the internet. It was originally created for the JavaScript programming language. JSON stands for JavaScript Object Notation.

This is also a more realistic example of how companies transfer data in industry as opposed to the text files we have mentioned so far.

We can also use it in Python. For instance, to exchange information between Python and JavaScript programs, through files or over the internet.

```
1 import json
2 with open('clean_data/results.json', 'w') as json_file:
3     json.dump(results, json_file)
```

