

Do the Work: Practice Reading CSV Data

In a previous lesson you learned how we can read data from a CSV file using D3, creating an array of objects made out of each line of data in the CSV.

You also learned that D3 automatically uses the headings in the first row of the CSV file as the properties for each entry in the data (CSV is comma separated values, so each entry is separated by a comma on a line of data). Write some D3 code to read in the attached file (Icecream.csv) and create an array of objects containing the ice cream data. Display the array you create in the console, and it should look like this:

```
1. 0:{year: 2000, pounds: 3422, topSeller: "Strawberry", maxStatePerCapita: "NJ"}
2. 1:{year: 2001, pounds: 3597, topSeller: "Strawberry", maxStatePerCapita: "NY"}
3. 2:{year: 2002, pounds: 3619, topSeller: "Vanilla", maxStatePerCapita: "NY"}
4. 3:{year: 2003, pounds: 3971, topSeller: "Vanilla", maxStatePerCapita: "CA"}
5. 4:{year: 2004, pounds: 4103, topSeller: "Chocolate", maxStatePerCapita: "CA"}
6. 5:{year: 2005, pounds: 4008, topSeller: "Strawberry", maxStatePerCapita: "FL"}
7. 6:{year: 2006, pounds: 4554, topSeller: "Chocolate", maxStatePerCapita: "NY"}
8. 7:{year: 2007, pounds: 4633, topSeller: "Vanilla", maxStatePerCapita: "NY"}
9. 8:{year: 2008, pounds: 3190, topSeller: "Strawberry", maxStatePerCapita: "CA"}
10. 9:{year: 2009, pounds: 2951, topSeller: "Mint Chocolate Chip", maxStatePerCapita: "PA"}
11. 10:{year: 2010, pounds: 3004, topSeller: "Pistachio", maxStatePerCapita: "NC"}
12. 11:{year: 2011, pounds: 3092, topSeller: "Chocolate Chip", maxStatePerCapita: "FL"}
13. 12:{year: 2012, pounds: 3803, topSeller: "Chocolate", maxStatePerCapita: "CA"}
14. 13:{year: 2013, pounds: 3922, topSeller: "Chocolate", maxStatePerCapita: "CA"}
15. 14:{year: 2014, pounds: 4133, topSeller: "Vanilla", maxStatePerCapita: "FL"}
16. 15:{year: 2015, pounds: 4219, topSeller: "Vanilla", maxStatePerCapita: "NY"}
17. 16:{year: 2016, pounds: 2382, topSeller: "Mint Chocolate Chip", maxStatePerCapita: "CA"}
18. 17:{year: 2017, pounds: 2133, topSeller: "Mint Chocolate Chip", maxStatePerCapita: "FL"}
```

Make sure you handle the cases where elements might be empty and use 0 for the numbers, and empty string ("") for the strings in case they are empty. Convert the strings that contain numbers into numbers.

Extra Credit: Can you use JavaScript to find the year that had the maximum pounds of ice cream sold?

(Note: all data values completely made up by me. It is a fact that I do love ice cream, however).

Resources for this lecture

- Icecream.csv