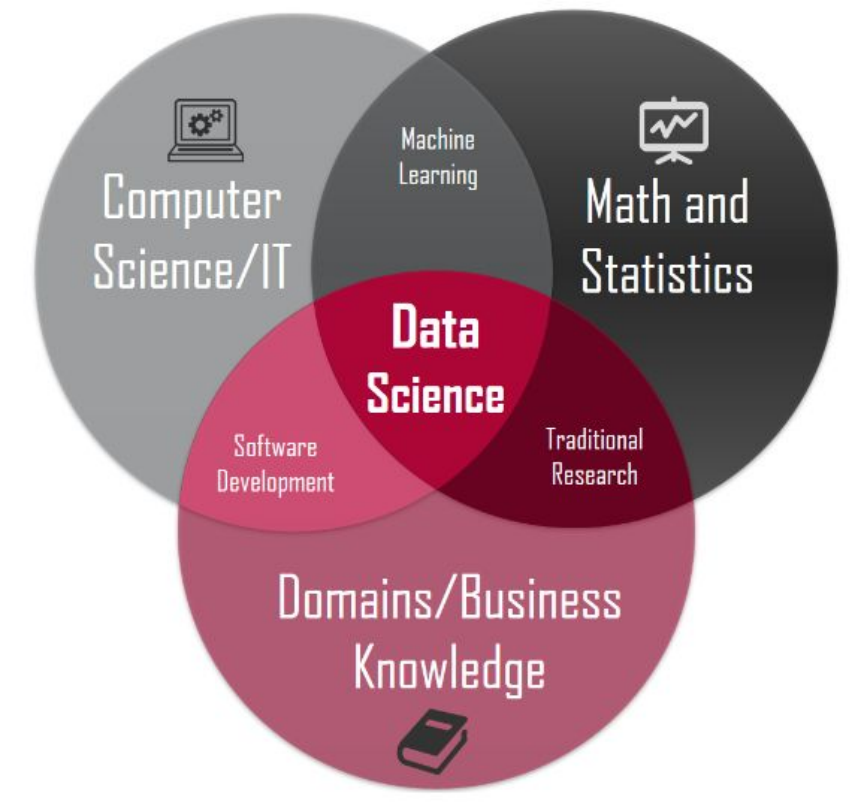
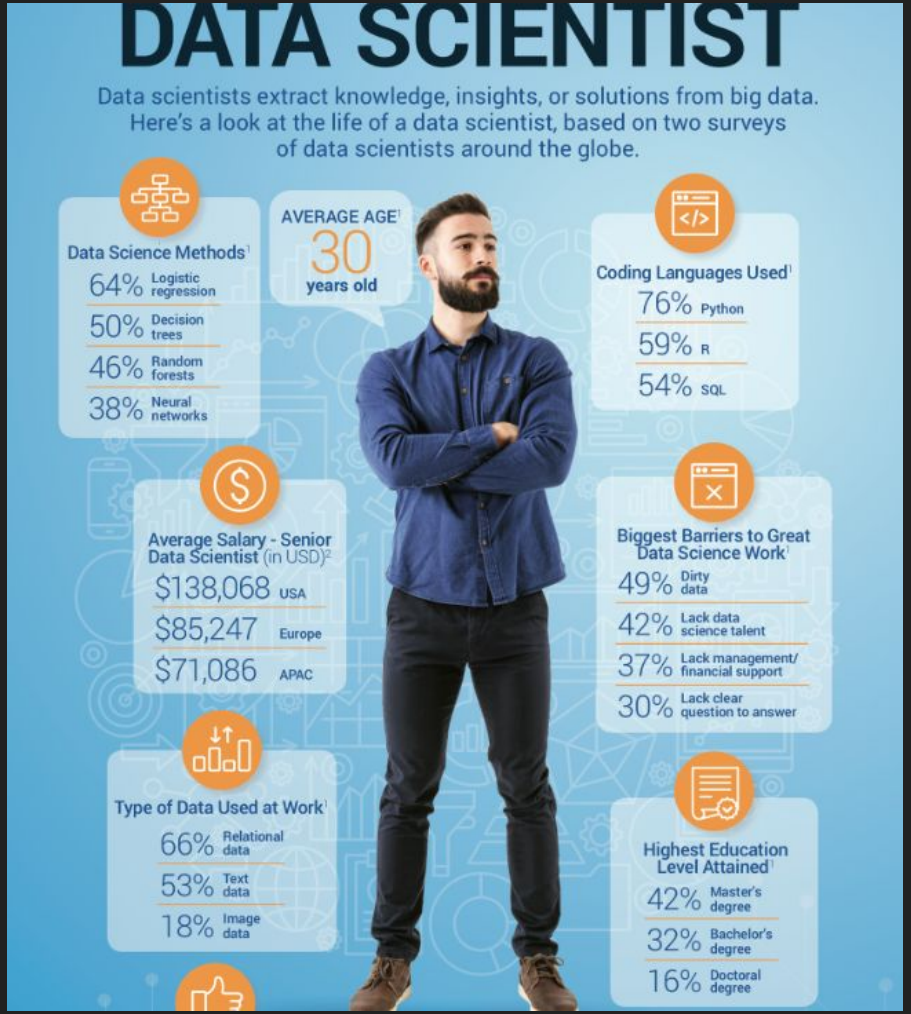
Intro to Data Science

lesson 1

Data File Types

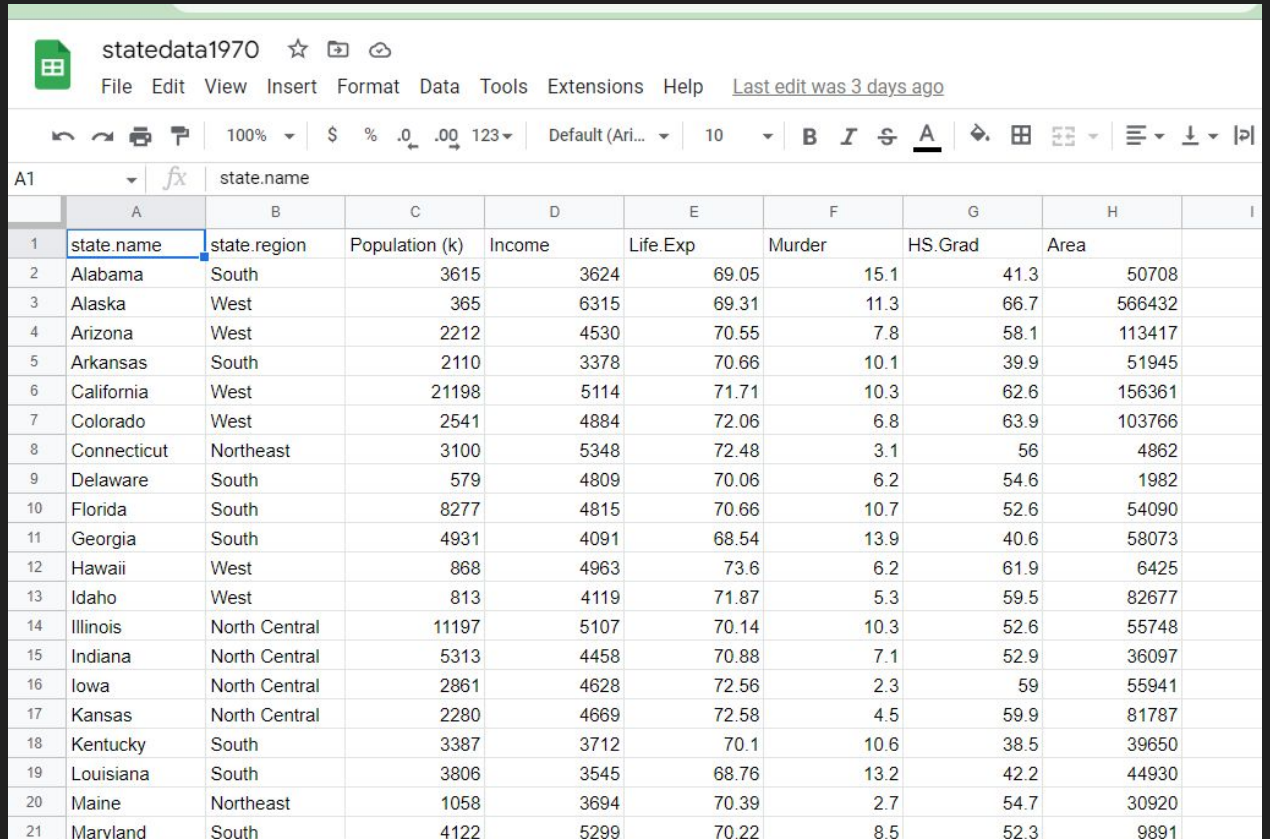
What is data science?





365
DATA SCIENCE
EXPLAINED IN 5 MINUTES

Saving a spreadsheet as a .csv and saving into p5.js



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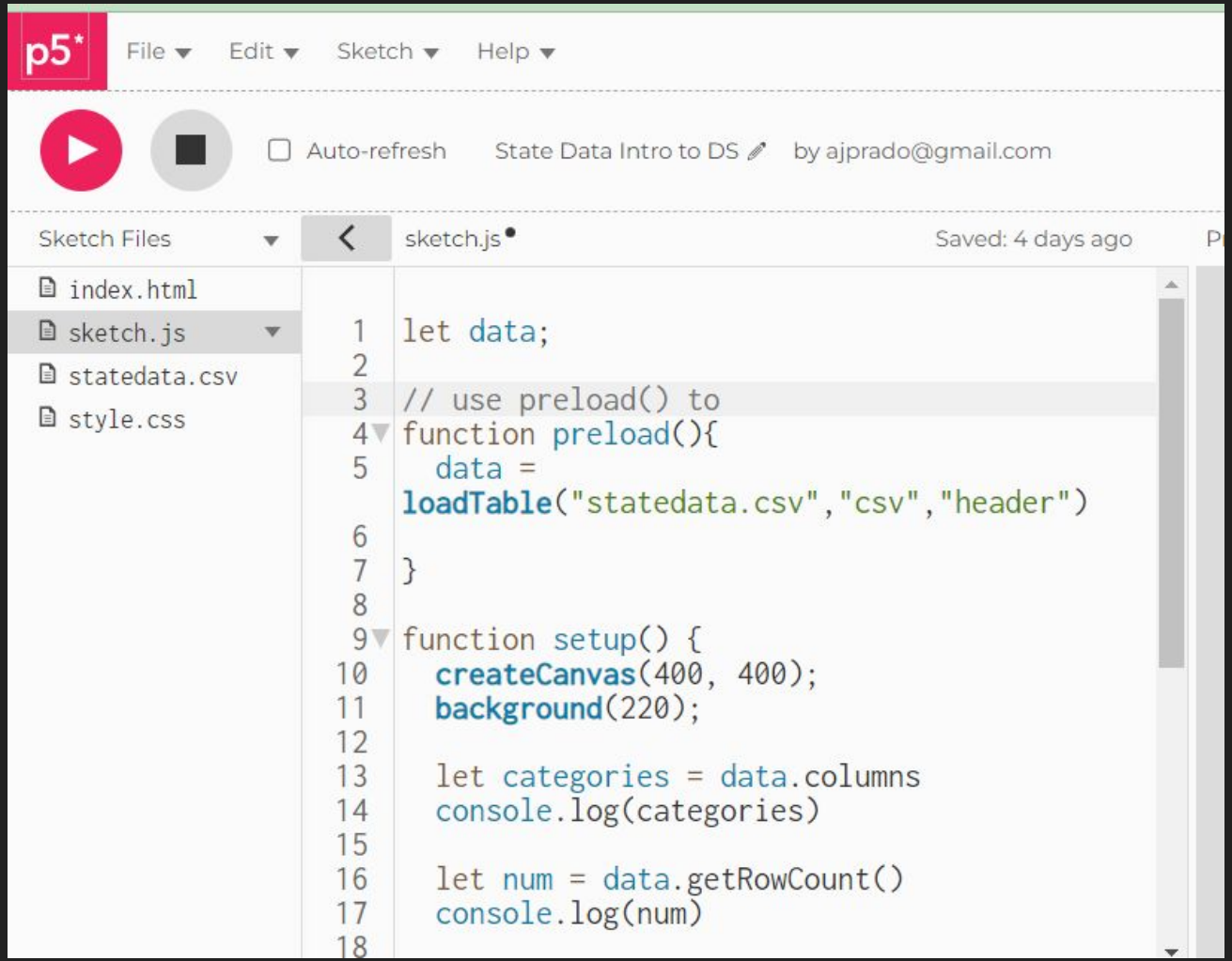
A1 fx state.name

	A	B	C	D	E	F	G	H
1	state.name	state.region	Population (k)	Income	Life.Exp	Murder	HS.Grad	Area
2	Alabama	South	3615	3624	69.05	15.1	41.3	50708
3	Alaska	West	365	6315	69.31	11.3	66.7	566432
4	Arizona	West	2212	4530	70.55	7.8	58.1	113417
5	Arkansas	South	2110	3378	70.66	10.1	39.9	51945
6	California	West	21198	5114	71.71	10.3	62.6	156361
7	Colorado	West	2541	4884	72.06	6.8	63.9	103766
8	Connecticut	Northeast	3100	5348	72.48	3.1	56	4862
9	Delaware	South	579	4809	70.06	6.2	54.6	1982
10	Florida	South	8277	4815	70.66	10.7	52.6	54090
11	Georgia	South	4931	4091	68.54	13.9	40.6	58073
12	Hawaii	West	868	4963	73.6	6.2	61.9	6425
13	Idaho	West	813	4119	71.87	5.3	59.5	82677
14	Illinois	North Central	11197	5107	70.14	10.3	52.6	55748
15	Indiana	North Central	5313	4458	70.88	7.1	52.9	36097
16	Iowa	North Central	2861	4628	72.56	2.3	59	55941
17	Kansas	North Central	2280	4669	72.58	4.5	59.9	81787
18	Kentucky	South	3387	3712	70.1	10.6	38.5	39650
19	Louisiana	South	3806	3545	68.76	13.2	42.2	44930
20	Maine	Northeast	1058	3694	70.39	2.7	54.7	30920
21	Maryland	South	4122	5299	70.22	8.5	52.3	9891

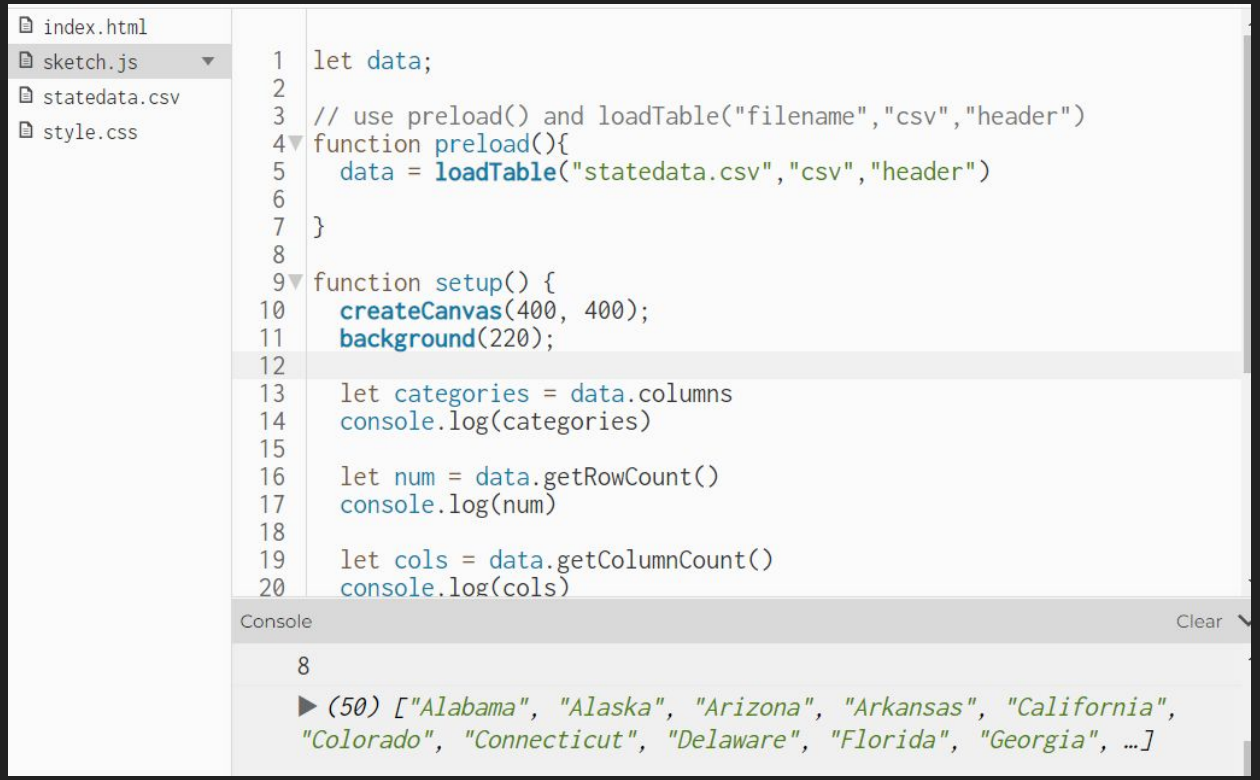

p5*
File
Edit
Sketch
Help
Auto-refresh
State Data Intro to DS
by ajprado@gmail.com
Sketch Files
sketch.js
Saved: 4 days ago
index.html
sketch.js
statedata.csv
style.css
let data;
// use preload() to
function preload(){
data =
loadTable("statedata.csv","csv","header")
}
function setup() {
createCanvas(400, 400);
background(220);
let categories = data.columns
console.log(categories)
let num = data.getRowCount()
console.log(num)

preload() and loadTable()

```
function preload() {
  //my table is comma separated value "csv"
  //and has a header specifying the columns labels
  table = loadTable('assets/mammals.csv', 'csv',
'header');
  //the file can be remote
  //table =
loadTable("http://p5js.org/reference/assets/mammals
.csv",
  //                    "csv", "header");
}
```

getRowCount() and getColumn()

```
  print(table.getRowCount() + ' total rows in
table');
  print(table.getColumnCount() + ' total columns in
table');

  print(table.getColumn('name'));
  //["Goat", "Leopard", "Zebra"]
```

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