

Python and CSV Files

To use Python to read csv files, we use the csv module. CSV literally stands for comma separated variable, where the comma is what is known as a "delimiter." While you can also just simply use Python's split() function, to separate lines and data within each line, the CSV module can also be used to make things easy.

Here is the sample code that matches the video:

Example CSV file data:

```
1/2/2014,5,8, red
1/3/2014,5,2, green
1/4/2014,9,1, blue
```

Next, let's cover the reading of CSV files into memory:

```
import csv

with open('example.csv') as csvfile:
    readCSV = csv.reader(csvfile, delimiter=',')
    for row in readCSV:
        print(row)
        print(row[0])
        print(row[0],row[1],row[2],)
```

Above, we've shown how to open a CSV file and read each row, as well as reference specific data on each row.

Next, we will show how to pull out specific data from the spreadsheet and save it to a list variable:

```
import csv

with open('example.csv') as csvfile:
    readCSV = csv.reader(csvfile, delimiter=',')
    dates = []
    colors = []
    for row in readCSV:
        color = row[3]
        date = row[0]

        dates.append(date)
        colors.append(color)

    print(dates)
```

```
print(colors)
```

Once we have this data, what can we do with it? Maybe we are curious about what color something was on a specific date.

```
import csv
```

```
with open('example.csv') as csvfile:
    readCSV = csv.reader(csvfile, delimiter=',')
    dates = []
    colors = []
    for row in readCSV:
        color = row[3]
        date = row[0]

        dates.append(date)
        colors.append(color)
```

```
print(dates)
print(colors)
```

```
# now, remember our lists?
```

```
whatColor = input('What color do you wish to know the date of?:')
coldex = colors.index(whatColor)
theDate = dates[coldex]
print('The date of',whatColor,'is:',theDate)
```