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reading CSV file and inserting it into 2d list in python



I want to insert the data of CSV file (network data such as: time,IP address, Port number) into 2D list in Python.

Here is the code:

```
import csv
datafile = open('a.csv', 'r')
datareader = csv.reader(datafile,delimiter=';')
data = []
for row in data reader:
    data.append(row)
print (data[1:4])
```

the result is:

```
[[ '1', '6', '192.168.4.118', '1605', '', '115.85.145.5', '80', '', '60', '0.00000000',
'0x0010', 'Jun 15, 2010 18:27:57.490835000', '0.000000000'],
[ '2', '6', '115.85.145.5', '80', '', '192.168.4.118', '1605', '', '1514', '0.002365000',
'0x0010', 'Jun 15, 2010 18:27:57.493200000', '0.002365000'],
[ '3', '6', '115.85.145.5', '80', '', '192.168.4.118', '1605', '', '1514', '0.003513000',
'0x0018', 'Jun 15, 2010 18:27:57.496713000', '0.005878000']]
```

But It is just one dimension and I don't know how to create 2D array and insert each element into the array.

Please suggest me what code should i use for this purpose. (I looked the previous hints in the website but non of them worked for me)

python csv multidimensional-array

edited Jul 7 '14 at 8:59

 Ashoka Lella
3,333 1 6 26

asked Jul 7 '14 at 8:56

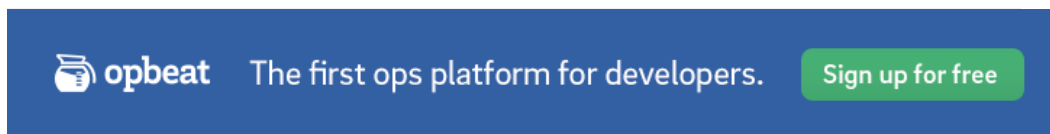
 pafpaf
18 5

4 Answers

You already have list of lists, which is sort of 2D array and you can address it like one `data[1][1]`, etc.

answered Jul 7 '14 at 9:04

 Dennis Sakva
378 2 10



That is a 2D array!

Can index it like this:

```
data[row][value]
```

For example, do get the IP address of the second line in your CSV:

```
data[1][2]
```

answered Jul 7 '14 at 9:04

 Jamie Cockburn
3,562 3 19

say your indicies for ip_address, time, port are

```
ip_address = 2
time = 3
port = 11
print [[item[ip_address], item[time], item[port]] for item in data]
```

output

```
[['192.168.4.118', '1605', 'Jun 15, 2010 18:27:57.490835000'],
 ['115.85.145.5', '80', 'Jun 15, 2010 18:27:57.493200000'],
 ['115.85.145.5', '80', 'Jun 15, 2010 18:27:57.496713000']]
```

you can do this when appending rows into data itself

```
for row in data reader:
    data.append([row[ip_address], row[time], row[port]])
```

edited Jul 7 '14 at 9:10

answered Jul 7 '14 at 9:04



Ashoka Lella

3,333 1 6 26

Here's a clean way to get a 2D array from a CSV that works with older Python versions too:

```
import csv
data = list(csv.reader(open(datafile)))
print data[1][4]
```

answered Oct 3 '14 at 13:32



karimtabet

91 3