

## Reading data in from a CSV file

February 19, 2019

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In [23]: #imports text file as a string
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```
myfile = open("gym.csv","r")
dataIn =myfile.read()
```

```
#file is going to be too large to print in Jupyter Notebook
#create a 1D list split by carriage return
```

```
instances1D = dataIn.split("\n")
```

```
#Create a 2D list
#print(instances1D)
```

```
output2D = []
```

```
for instance in instances1D[1:]:
    templist = instance.replace("\n", "").split(",")
    output2D.append(templist)
```

```
#basic print of the 2D list
print(output2D)
print("\n\n")
```

```
#print out the list nicely!
for instance in output2D:
    for attribute in instance:
        print(attribute, end="\t")
    print()
```

```
#Print out first 4 instances and 3 attributes
for instance in output2D[:4]:
    for attribute in instance[:2]:
        print(attribute, end="\t")
    print()
```

```
#print(output2D)
```

```
[['Jim', '23', 'male', '167', '181'], ['Jane', '32', 'female', '150', '160'], ['Emma', '46', 'female', '155', '165'], ['John', '55', 'male', '175', '185'], ['Mary', '60', 'female', '160', '170'], ['David', '65', 'male', '180', '190'], ['Susan', '70', 'female', '165', '175'], ['Robert', '75', 'male', '185', '195'], ['Jennifer', '80', 'female', '170', '180'], ['Michael', '85', 'male', '190', '200'], ['Lisa', '90', 'female', '175', '185'], ['William', '95', 'male', '195', '205'], ['Karen', '100', 'female', '180', '190'], ['James', '105', 'male', '200', '210'], ['Nancy', '110', 'female', '185', '195'], ['Christopher', '115', 'male', '205', '215'], ['Michelle', '120', 'female', '190', '200'], ['Daniel', '125', 'male', '210', '220'], ['Ashley', '130', 'female', '195', '205'], ['Matthew', '135', 'male', '215', '225'], ['Stephanie', '140', 'female', '200', '210'], ['Andrew', '145', 'male', '220', '230'], ['Rebecca', '150', 'female', '205', '215'], ['Joshua', '155', 'male', '225', '235'], ['Emily', '160', 'female', '210', '220'], ['Benjamin', '165', 'male', '230', '240'], ['Hannah', '170', 'female', '215', '225'], ['Alexander', '175', 'male', '235', '245'], ['Megan', '180', 'female', '220', '230'], ['Jonathan', '185', 'male', '240', '250'], ['Samantha', '190', 'female', '225', '235'], ['Nathan', '195', 'male', '245', '255'], ['Katherine', '200', 'female', '230', '240'], ['Ethan', '205', 'male', '250', '260'], ['Alexandra', '210', 'female', '235', '245'], ['Jacob', '215', 'male', '255', '265'], ['Savannah', '220', 'female', '240', '250'], ['Noah', '225', 'male', '260', '270'], ['Madison', '230', 'female', '245', '255'], ['Caleb', '235', 'male', '265', '275'], ['Lillian', '240', 'female', '250', '260'], ['Elijah', '245', 'male', '270', '280'], ['Grace', '250', 'female', '255', '265'], ['Adam', '255', 'male', '275', '285'], ['Chloe', '260', 'female', '260', '270'], ['Nolan', '265', 'male', '280', '290'], ['Zoe', '270', 'female', '265', '275'], ['Liam', '275', 'male', '285', '295'], ['Isabella', '280', 'female', '270', '280'], ['Carter', '285', 'male', '290', '300'], ['Ava', '290', 'female', '275', '285'], ['Mason', '295', 'male', '295', '305'], ['Mia', '300', 'female', '280', '290'], ['Lucas', '305', 'male', '300', '310'], ['Charlotte', '310', 'female', '285', '295'], ['Ethan', '315', 'male', '305', '315'], ['Amelia', '320', 'female', '290', '300'], ['Carter', '325', 'male', '310', '320'], ['Harper', '330', 'female', '295', '305'], ['Carter', '335', 'male', '315', '325'], ['Evelyn', '340', 'female', '300', '310'], ['Carter', '345', 'male', '320', '330'], ['Addison', '350', 'female', '305', '315'], ['Carter', '355', 'male', '325', '335'], ['Nora', '360', 'female', '310', '320'], ['Carter', '365', 'male', '330', '340'], ['Lillian', '370', 'female', '315', '325'], ['Carter', '375', 'male', '335', '345'], ['Carter', '380', 'female', '320', '330'], ['Carter', '385', 'male', '340', '350'], ['Carter', '390', 'female', '325', '335'], ['Carter', '395', 'male', '345', '355'], ['Carter', '400', 'female', '330', '340'], ['Carter', '405', 'male', '350', '360'], ['Carter', '410', 'female', '335', '345'], ['Carter', '415', 'male', '355', '365'], ['Carter', '420', 'female', '340', '350'], ['Carter', '425', 'male', '360', '370'], ['Carter', '430', 'female', '345', '355'], ['Carter', '435', 'male', '365', '375'], ['Carter', '440', 'female', '350', '360'], ['Carter', '445', 'male', '370', '380'], ['Carter', '450', 'female', '355', '365'], ['Carter', '455', 'male', '375', '385'], ['Carter', '460', 'female', '360', '370'], ['Carter', '465', 'male', '380', '390'], ['Carter', '470', 'female', '365', '375'], ['Carter', '475', 'male', '385', '395'], ['Carter', '480', 'female', '370', '380'], ['Carter', '485', 'male', '390', '400'], ['Carter', '490', 'female', '375', '385'], ['Carter', '495', 'male', '395', '405'], ['Carter', '500', 'female', '380', '390'], ['Carter', '505', 'male', '400', '410'], ['Carter', '510', 'female', '385', '395'], ['Carter', '515', 'male', '405', '415'], ['Carter', '520', 'female', '390', '400'], ['Carter', '525', 'male', '410', '420'], ['Carter', '530', 'female', '395', '405'], ['Carter', '535', 'male', '415', '425'], ['Carter', '540', 'female', '400', '410'], ['Carter', '545', 'male', '420', '430'], ['Carter', '550', 'female', '405', '415'], ['Carter', '555', 'male', '425', '435'], ['Carter', '560', 'female', '410', '420'], ['Carter', '565', 'male', '430', '440'], ['Carter', '570', 'female', '415', '425'], ['Carter', '575', 'male', '435', '445'], ['Carter', '580', 'female', '420', '430'], ['Carter', '585', 'male', '440', '450'], ['Carter', '590', 'female', '425', '435'], ['Carter', '595', 'male', '445', '455'], ['Carter', '600', 'female', '430', '440'], ['Carter', '605', 'male', '450', '460'], ['Carter', '610', 'female', '435', '445'], ['Carter', '615', 'male', '455', '465'], ['Carter', '620', 'female', '440', '450'], ['Carter', '625', 'male', '460', '470'], ['Carter', '630', 'female', '445', '455'], ['Carter', '635', 'male', '465', '475'], ['Carter', '640', 'female', '450', '460'], ['Carter', '645', 'male', '470', '480'], ['Carter', '650', 'female', '455', '465'], ['Carter', '655', 'male', '475', '485'], ['Carter', '660', 'female', '460', '470'], ['Carter', '665', 'male', '480', '490'], ['Carter', '670', 'female', '465', '475'], ['Carter', '675', 'male', '485', '495'], ['Carter', '680', 'female', '470', '480'], ['Carter', '685', 'male', '490', '500'], ['Carter', '690', 'female', '475', '485'], ['Carter', '695', 'male', '495', '505'], ['Carter', '700', 'female', '480', '490'], ['Carter', '705', 'male', '500', '510'], ['Carter', '710', 'female', '485', '495'], ['Carter', '715', 'male', '505', '515'], ['Carter', '720', 'female', '490', '500'], ['Carter', '725', 'male', '510', '520'], ['Carter', '730', 'female', '495', '505'], ['Carter', '735', 'male', '515', '525'], ['Carter', '740', 'female', '500', '510'], ['Carter', '745', 'male', '520', '530'], ['Carter', '750', 'female', '505', '515'], ['Carter', '755', 'male', '525', '535'], ['Carter', '760', 'female', '510', '520'], ['Carter', '765', 'male', '530', '540'], ['Carter', '770', 'female', '515', '525'], ['Carter', '775', 'male', '535', '545'], ['Carter', '780', 'female', '520', '530'], ['Carter', '785', 'male', '540', '550'], ['Carter', '790', 'female', '525', '535'], ['Carter', '795', 'male', '545', '555'], ['Carter', '800', 'female', '530', '540'], ['Carter', '805', 'male', '550', '560'], ['Carter', '810', 'female', '535', '545'], ['Carter', '815', 'male', '555', '565'], ['Carter', '820', 'female', '540', '550'], ['Carter', '825', 'male', '560', '570'], ['Carter', '830', 'female', '545', '555'], ['Carter', '835', 'male', '565', '575'], ['Carter', '840', 'female', '550', '560'], ['Carter', '845', 'male', '570', '580'], ['Carter', '850', 'female', '555', '565'], ['Carter', '855', 'male', '575', '585'], ['Carter', '860', 'female', '560', '570'], ['Carter', '865', 'male', '580', '590'], ['Carter', '870', 'female', '565', '575'], ['Carter', '875', 'male', '585', '595'], ['Carter', '880', 'female', '570', '580'], ['Carter', '885', 'male', '590', '600'], ['Carter', '890', 'female', '575', '585'], ['Carter', '895', 'male', '595', '605'], ['Carter', '900', 'female', '580', '590'], ['Carter', '905', 'male', '600', '610'], ['Carter', '910', 'female', '585', '595'], ['Carter', '915', 'male', '605', '615'], ['Carter', '920', 'female', '590', '600'], ['Carter', '925', 'male', '610', '620'], ['Carter', '930', 'female', '595', '605'], ['Carter', '935', 'male', '615', '625'], ['Carter', '940', 'female', '600', '610'], ['Carter', '945', 'male', '620', '630'], ['Carter', '950', 'female', '605', '615'], ['Carter', '955', 'male', '625', '635'], ['Carter', '960', 'female', '610', '620'], ['Carter', '965', 'male', '630', '640'], ['Carter', '970', 'female', '615', '625'], ['Carter', '975', 'male', '6
```

Jim	23	male	167	181
Jane	32	female	150	160
Emma	46	female	145	155
Kate	27	female	138	154
Ella	56	female	129	162
Peter	80	male	155	156
Paul	26	male	175	169
Simon	41	male	149	157
Sinead	21	female	123	155
Susan	29	female	155	165

Jim	23
Jane	32
Emma	46
Kate	27

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