```python
## read a csv file and convert it into json file
import csv
import json

# Open the CSV file and read its contents
with open('data.csv', newline='') as csv_file:
    csv_reader = csv.DictReader(csv_file)

    # Create an empty list to hold the JSON objects
    json_objects = []

    # Loop through each row in the CSV file
    for row in csv_reader:
        # Convert the row to a JSON object and append it to the list
        json_objects.append(row)

# Write the JSON objects to a file with indentation
with open('data.json', 'w') as json_file:
    json.dump(json_objects, json_file, indent=4)
```

Listing 1: Python Code

```
ID, NAME, AGE, CITY
1, John, 20, New York
2, Mary, 25, Boston
3, Peter, 30, Chicago
4, John, 35, New York
5, Mary, 40, Boston
6, Peter, 45, Chicago
7, John, 50, New York
8, Mary, 55, Boston
9, Peter, 60, Chicago
10, Randy, 65, Los Angeles
```

Listing 2: CSV Input

```
[
    {
        "ID": "1",
        " NAME": " John",
        " AGE": " 20",
        " CITY": " New York"
    },
    {
        "ID": "2",
        " NAME": " Mary",
        " AGE": " 25",
        " CITY": " Boston"
    },
    {
        "ID": "3",
        " NAME": " Peter",
        " AGE": " 30",
        " CITY": " Chicago"
    },
    {
        "ID": "4",
```

```
        " NAME": " John",
        " AGE": " 35",
        " CITY": " New York"
    },
    {
        "ID": "5",
        " NAME": " Mary",
        " AGE": " 40",
        " CITY": " Boston"
    },
    {
        "ID": "6",
        " NAME": " Peter",
        " AGE": " 45",
        " CITY": " Chicago"
    },
    {
        "ID": "7",
        " NAME": " John",
        " AGE": " 50",
        " CITY": " New York"
    },
    {
        "ID": "8",
        " NAME": " Mary",
        " AGE": " 55",
        " CITY": " Boston"
    },
    {
        "ID": "9",
        " NAME": " Peter",
        " AGE": " 60",
        " CITY": " Chicago"
    },
    {
        "ID": "10",
        " NAME": " Randy",
        " AGE": " 65",
        " CITY": " Los Angeles"
    }
]
```


Listing 3: JSON Output