

Manipulating JSON Files

March 8, 2022

```
[46]: import json
```

```
[47]: a_file = open("MOCK_DATA.json", "r")
```

```
[48]: a_file
```

```
[48]: <_io.TextIOWrapper name='MOCK_DATA.json' mode='r' encoding='cp1252'>
```

```
[49]: json_object = json.load(a_file)
```

```
[50]: a_file.close()
```

```
[51]: json_object
```

```
[51]: [{ 'id': 1,
      'first_name': 'Adelheid',
      'last_name': 'Tures',
      'email': 'atures0@fotki.com',
      'gender': 'Male'},
    { 'id': 2,
      'first_name': 'Gerick',
      'last_name': 'Frossell',
      'email': 'gfrossell1@house.gov',
      'gender': 'Female'},
    { 'id': 3,
      'first_name': 'Gav',
      'last_name': 'Illyes',
      'email': 'gillyes2@opera.com',
      'gender': 'Male'},
    { 'id': 4,
      'first_name': 'Emmi',
      'last_name': 'Happs',
      'email': 'ehapps3@paginegialle.it',
      'gender': 'Male'},
    { 'id': 5,
      'first_name': 'Arlyn',
      'last_name': 'Kunzler',
      'email': 'akunzler4@abc.net.au',
```

```

    'gender': 'NA'},
{'id': 6,
 'first_name': 'Meggy',
 'last_name': 'McGready',
 'email': 'mmcgready5@cargocollective.com',
 'gender': 'Male'},
{'id': 7,
 'first_name': 'Brett',
 'last_name': 'Bottomley',
 'email': 'bbottomley6@state.tx.us',
 'gender': 'Female'},
{'id': 8,
 'first_name': 'Tami',
 'last_name': 'Stair',
 'email': 'tstair7@wikipedia.org',
 'gender': 'Female'},
{'id': 9,
 'first_name': 'Cthrine',
 'last_name': 'Padrick',
 'email': 'cpadrick8@opera.com',
 'gender': 'Female'},
{'id': 10,
 'first_name': 'Rosina',
 'last_name': 'Byatt',
 'email': 'rbyatt9@intel.com',
 'gender': 'Male'},
{'id': 11,
 'first_name': 'Darryl',
 'last_name': 'Waine',
 'email': 'dwainea@sourceforge.net',
 'gender': 'Female'},
{'id': 12,
 'first_name': 'Silvanus',
 'last_name': 'Annes',
 'email': 'sannesb@aboutads.info',
 'gender': 'Female'},
{'id': 13,
 'first_name': 'Saloma',
 'last_name': 'Coney',
 'email': 'sconeyc@hud.gov',
 'gender': 'Male'},
{'id': 14,
 'first_name': 'Shurlocke',
 'last_name': 'Bartosinski',
 'email': 'sbartosinskid@cbsnews.com',
 'gender': 'NA'},
{'id': 15,

```

```

    'first_name': 'Katheryn',
    'last_name': 'Hyslop',
    'email': 'khyslope@abc.net.au',
    'gender': 'Male'},
{'id': 16,
 'first_name': 'Amory',
 'last_name': 'Brand-Hardy',
 'email': 'abrandhardyf@artisteer.com',
 'gender': 'Female'},
{'id': 17,
 'first_name': 'Luce',
 'last_name': 'Haborn',
 'email': 'lhaborn@gfd.gov',
 'gender': 'Genderqueer'},
{'id': 18,
 'first_name': 'Roley',
 'last_name': 'Whitticks',
 'email': 'rwhitticksh@alibaba.com',
 'gender': 'Male'},
{'id': 19,
 'first_name': 'Sofie',
 'last_name': 'Jirak',
 'email': 'sjiraki@loc.gov',
 'gender': 'Male'},
{'id': 20,
 'first_name': 'Tracy',
 'last_name': 'Scoffins',
 'email': 'tscoffinsj@about.me',
 'gender': 'Female'},
{'id': 22,
 'first_name': 'Ed',
 'last_name': 'Sheeran',
 'email': 'sheeraned@gmail.com',
 'gender': 'Male'}]

```

```

[52]: for i in json_object:
      print(i)

```

```

{'id': 1, 'first_name': 'Adelheid', 'last_name': 'Tures', 'email':
'atures00fotki.com', 'gender': 'Male'}
{'id': 2, 'first_name': 'Gerick', 'last_name': 'Frossell', 'email':
'gfrossell1@house.gov', 'gender': 'Female'}
{'id': 3, 'first_name': 'Gav', 'last_name': 'Illyes', 'email':
'gillyes2@opera.com', 'gender': 'Male'}
{'id': 4, 'first_name': 'Emmi', 'last_name': 'Happs', 'email':
'ehapps3@paginegialle.it', 'gender': 'Male'}
{'id': 5, 'first_name': 'Arlyn', 'last_name': 'Kunzler', 'email':
'akunzler4@abc.net.au', 'gender': 'NA'}

```

```
{'id': 6, 'first_name': 'Meggy', 'last_name': 'McGready', 'email':
'mmcgready5@cargocollective.com', 'gender': 'Male'}
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'bbottomley6@state.tx.us', 'gender': 'Female'}
{'id': 8, 'first_name': 'Tami', 'last_name': 'Stair', 'email':
'tstair7@wikipedia.org', 'gender': 'Female'}
{'id': 9, 'first_name': 'Cthrine', 'last_name': 'Padrick', 'email':
'cpadrick8@opera.com', 'gender': 'Female'}
{'id': 10, 'first_name': 'Rosina', 'last_name': 'Byatt', 'email':
'rbyatt9@intel.com', 'gender': 'Male'}
{'id': 11, 'first_name': 'Darryl', 'last_name': 'Waine', 'email':
'dwainea@sourceforge.net', 'gender': 'Female'}
{'id': 12, 'first_name': 'Silvanus', 'last_name': 'Annes', 'email':
'sannesb@aboutads.info', 'gender': 'Female'}
{'id': 13, 'first_name': 'Saloma', 'last_name': 'Coney', 'email':
'sconeyc@hud.gov', 'gender': 'Male'}
{'id': 14, 'first_name': 'Shurlocke', 'last_name': 'Bartosinski', 'email':
'sbartosinskid@cbsnews.com', 'gender': 'NA'}
{'id': 15, 'first_name': 'Katheryn', 'last_name': 'Hyslop', 'email':
'khyslope@abc.net.au', 'gender': 'Male'}
{'id': 16, 'first_name': 'Amory', 'last_name': 'Brand-Hardy', 'email':
'abrandhardyf@artisteer.com', 'gender': 'Female'}
{'id': 17, 'first_name': 'Luce', 'last_name': 'Haborn', 'email':
'lhaborng@fda.gov', 'gender': 'Genderqueer'}
{'id': 18, 'first_name': 'Roley', 'last_name': 'Whitticks', 'email':
'rwhitticksh@alibaba.com', 'gender': 'Male'}
{'id': 19, 'first_name': 'Sofie', 'last_name': 'Jirak', 'email':
'sjiraki@loc.gov', 'gender': 'Male'}
{'id': 20, 'first_name': 'Tracy', 'last_name': 'Scoffins', 'email':
'tscoffinsj@about.me', 'gender': 'Female'}
{'id': 22, 'first_name': 'Ed', 'last_name': 'Sheeran', 'email':
'sheeraned@gmail.com', 'gender': 'Male'}
```

```
[53]: for i in json_object:
        if i["gender"] == 'NA':
            print(i)
```

```
{'id': 5, 'first_name': 'Arlyn', 'last_name': 'Kunzler', 'email':
'akunzler4@abc.net.au', 'gender': 'NA'}
{'id': 14, 'first_name': 'Shurlocke', 'last_name': 'Bartosinski', 'email':
'sbartosinskid@cbsnews.com', 'gender': 'NA'}
```

```
[54]: for i in json_object:
        if i["gender"] == "NA":
            i["gender"] = "-"
            print(i)
```

```
{'id': 5, 'first_name': 'Arlyn', 'last_name': 'Kunzler', 'email':
'akunzler4@abc.net.au', 'gender': '-'}
```

```
{'id': 14, 'first_name': 'Shurlocke', 'last_name': 'Bartosinski', 'email':  
'sbartosinskid@cbsnews.com', 'gender': '-'}
```

```
[55]: for i in json_object:  
       print(i)
```

```
{'id': 1, 'first_name': 'Adelheid', 'last_name': 'Tures', 'email':  
'atures0@fotki.com', 'gender': 'Male'}  
{'id': 2, 'first_name': 'Gerick', 'last_name': 'Frossell', 'email':  
'gfrossell1@house.gov', 'gender': 'Female'}  
{'id': 3, 'first_name': 'Gav', 'last_name': 'Illyes', 'email':  
'gillyes2@opera.com', 'gender': 'Male'}  
{'id': 4, 'first_name': 'Emmi', 'last_name': 'Happs', 'email':  
'ehapps3@paginegialle.it', 'gender': 'Male'}  
{'id': 5, 'first_name': 'Arlyn', 'last_name': 'Kunzler', 'email':  
'akunzler4@abc.net.au', 'gender': '-'}  
{'id': 6, 'first_name': 'Meggy', 'last_name': 'McGready', 'email':  
'mmcgregady5@cargocollective.com', 'gender': 'Male'}  
{'id': 7, 'first_name': 'Brett', 'last_name': 'Bottomley', 'email':  
'bbottomley6@state.tx.us', 'gender': 'Female'}  
{'id': 8, 'first_name': 'Tami', 'last_name': 'Stair', 'email':  
'tstair7@wikipedia.org', 'gender': 'Female'}  
{'id': 9, 'first_name': 'Cthrine', 'last_name': 'Padrick', 'email':  
'cpadrick8@opera.com', 'gender': 'Female'}  
{'id': 10, 'first_name': 'Rosina', 'last_name': 'Byatt', 'email':  
'rbyatt9@intel.com', 'gender': 'Male'}  
{'id': 11, 'first_name': 'Darryl', 'last_name': 'Waine', 'email':  
'dwainea@sourceforge.net', 'gender': 'Female'}  
{'id': 12, 'first_name': 'Silvanus', 'last_name': 'Annes', 'email':  
'sannesb@aboutads.info', 'gender': 'Female'}  
{'id': 13, 'first_name': 'Saloma', 'last_name': 'Coney', 'email':  
'sconeyc@hud.gov', 'gender': 'Male'}  
{'id': 14, 'first_name': 'Shurlocke', 'last_name': 'Bartosinski', 'email':  
'sbartosinskid@cbsnews.com', 'gender': '-'}  
{'id': 15, 'first_name': 'Katheryn', 'last_name': 'Hyslop', 'email':  
'khyslope@abc.net.au', 'gender': 'Male'}  
{'id': 16, 'first_name': 'Amory', 'last_name': 'Brand-Hardy', 'email':  
'abrandhardyf@artisteer.com', 'gender': 'Female'}  
{'id': 17, 'first_name': 'Luce', 'last_name': 'Haborn', 'email':  
'lhaborn9@fda.gov', 'gender': 'Genderqueer'}  
{'id': 18, 'first_name': 'Roley', 'last_name': 'Whitticks', 'email':  
'rwhitticksh@alibaba.com', 'gender': 'Male'}  
{'id': 19, 'first_name': 'Sofie', 'last_name': 'Jirak', 'email':  
'sjiraki@loc.gov', 'gender': 'Male'}  
{'id': 20, 'first_name': 'Tracy', 'last_name': 'Scoffins', 'email':  
'tscoffinsj@about.me', 'gender': 'Female'}  
{'id': 22, 'first_name': 'Ed', 'last_name': 'Sheeran', 'email':  
'sheeraned@gmail.com', 'gender': 'Male'}
```

```
[56]: ## Update

json_object.append({"id":21,"first_name":"Camila","last_name":"Cabello","email":
↪"cc@gmail.com","gender":"Male"})
```

```
[57]: for i in json_object:
        print(i)
```

```
{'id': 1, 'first_name': 'Adelheid', 'last_name': 'Tures', 'email':
'atures0@fotki.com', 'gender': 'Male'}
{'id': 2, 'first_name': 'Gerick', 'last_name': 'Frossell', 'email':
'gfrossell1@house.gov', 'gender': 'Female'}
{'id': 3, 'first_name': 'Gav', 'last_name': 'Illyes', 'email':
'gillyes2@opera.com', 'gender': 'Male'}
{'id': 4, 'first_name': 'Emmi', 'last_name': 'Happs', 'email':
'ehapps3@paginegialle.it', 'gender': 'Male'}
{'id': 5, 'first_name': 'Arlyn', 'last_name': 'Kunzler', 'email':
'akunzler4@abc.net.au', 'gender': '-' }
{'id': 6, 'first_name': 'Meggy', 'last_name': 'McGready', 'email':
'mmcgready5@cargocollective.com', 'gender': 'Male'}
{'id': 7, 'first_name': 'Brett', 'last_name': 'Bottomley', 'email':
'bbottomley6@state.tx.us', 'gender': 'Female'}
{'id': 8, 'first_name': 'Tami', 'last_name': 'Stair', 'email':
'tstair7@wikipedia.org', 'gender': 'Female'}
{'id': 9, 'first_name': 'Cthrine', 'last_name': 'Padrick', 'email':
'cpadrick8@opera.com', 'gender': 'Female'}
{'id': 10, 'first_name': 'Rosina', 'last_name': 'Byatt', 'email':
'rbyatt9@intel.com', 'gender': 'Male'}
{'id': 11, 'first_name': 'Darryl', 'last_name': 'Waine', 'email':
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{'id': 12, 'first_name': 'Silvanus', 'last_name': 'Annes', 'email':
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{'id': 13, 'first_name': 'Saloma', 'last_name': 'Coney', 'email':
'sconeyc@hud.gov', 'gender': 'Male'}
{'id': 14, 'first_name': 'Shurlocke', 'last_name': 'Bartosinski', 'email':
'sbartosinskid@cbsnews.com', 'gender': '-' }
{'id': 15, 'first_name': 'Katheryn', 'last_name': 'Hyslop', 'email':
'khyslope@abc.net.au', 'gender': 'Male'}
{'id': 16, 'first_name': 'Amory', 'last_name': 'Brand-Hardy', 'email':
'abrandhardyf@artisteer.com', 'gender': 'Female'}
{'id': 17, 'first_name': 'Luce', 'last_name': 'Haborn', 'email':
'lhaborn9@fda.gov', 'gender': 'Genderqueer'}
{'id': 18, 'first_name': 'Roley', 'last_name': 'Whitticks', 'email':
'rwhitticksh@alibaba.com', 'gender': 'Male'}
{'id': 19, 'first_name': 'Sofie', 'last_name': 'Jirak', 'email':
'sjiraki@loc.gov', 'gender': 'Male'}
{'id': 20, 'first_name': 'Tracy', 'last_name': 'Scoffins', 'email':
'tscoffinsj@about.me', 'gender': 'Female'}
```

```
{'id': 22, 'first_name': 'Ed', 'last_name': 'Sheeran', 'email':
'sheeraned@gmail.com', 'gender': 'Male'}
{'id': 21, 'first_name': 'Camila', 'last_name': 'Cabello', 'email':
'cc@gmail.com', 'gender': 'Male'}
```

```
[58]: b_file = open("MOCK_DATA.json","w")
```

```
[59]: json.dump(json_object,b_file)
```

```
[60]: b_file.close()
```

```
[ ]: ## Read
```

```
[61]: c_file = open("MOCK_DATA.json","r+")
```

```
[62]: obj2 = json.load(c_file)
```

```
[63]: obj2
```

```
[63]: [{ 'id': 1,
        'first_name': 'Adelheid',
        'last_name': 'Tures',
        'email': 'atures00@fotki.com',
        'gender': 'Male'},
      { 'id': 2,
        'first_name': 'Gerick',
        'last_name': 'Frossell',
        'email': 'gfrossell1@house.gov',
        'gender': 'Female'},
      { 'id': 3,
        'first_name': 'Gav',
        'last_name': 'Illyes',
        'email': 'gillyes2@opera.com',
        'gender': 'Male'},
      { 'id': 4,
        'first_name': 'Emmi',
        'last_name': 'Happs',
        'email': 'ehapps3@paginegialle.it',
        'gender': 'Male'},
      { 'id': 5,
        'first_name': 'Arlyn',
        'last_name': 'Kunzler',
        'email': 'akunzler4@abc.net.au',
        'gender': '-'},
      { 'id': 6,
        'first_name': 'Meggy',
        'last_name': 'McGready',
        'email': 'mmcgregady5@cargocollective.com',
```

```

    'gender': 'Male'},
{'id': 7,
 'first_name': 'Brett',
 'last_name': 'Bottomley',
 'email': 'bbottomley6@state.tx.us',
 'gender': 'Female'},
{'id': 8,
 'first_name': 'Tami',
 'last_name': 'Stair',
 'email': 'tstair7@wikipedia.org',
 'gender': 'Female'},
{'id': 9,
 'first_name': 'Cthrine',
 'last_name': 'Padrick',
 'email': 'cpadrick8@opera.com',
 'gender': 'Female'},
{'id': 10,
 'first_name': 'Rosina',
 'last_name': 'Byatt',
 'email': 'rbyatt9@intel.com',
 'gender': 'Male'},
{'id': 11,
 'first_name': 'Darryl',
 'last_name': 'Waine',
 'email': 'dwainea@sourceforge.net',
 'gender': 'Female'},
{'id': 12,
 'first_name': 'Silvanus',
 'last_name': 'Annes',
 'email': 'sannesb@aboutads.info',
 'gender': 'Female'},
{'id': 13,
 'first_name': 'Saloma',
 'last_name': 'Coney',
 'email': 'sconeyc@hud.gov',
 'gender': 'Male'},
{'id': 14,
 'first_name': 'Shurlocke',
 'last_name': 'Bartosinski',
 'email': 'sbartosinskid@cbsnews.com',
 'gender': '-'},
{'id': 15,
 'first_name': 'Katheryn',
 'last_name': 'Hyslop',
 'email': 'khyslope@abc.net.au',
 'gender': 'Male'},
{'id': 16,

```



```

    'first_name': 'Amory',
    'last_name': 'Brand-Hardy',
    'email': 'abrandhardyf@artisteer.com',
    'gender': 'Female'},
{'id': 17,
 'first_name': 'Luce',
 'last_name': 'Haborn',
 'email': 'lhabornrg@fda.gov',
 'gender': 'Genderqueer'},
{'id': 18,
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 'email': 'tscoffinsj@about.me',
 'gender': 'Female'},
{'id': 22,
 'first_name': 'Ed',
 'last_name': 'Sheeran',
 'email': 'sheeraned@gmail.com',
 'gender': 'Male'},
{'id': 21,
 'first_name': 'Camila',
 'last_name': 'Cabello',
 'email': 'cc@gmail.com',
 'gender': 'Male'}]

```

```
[64]: obj2[0]["email"]
```

```
[64]: 'atures0@fotki.com'
```

```
[67]: #Delete
```

```

for i in range(len(obj2)-1):
    if obj2[i]["email"] == "tscoffinsj@about.me":
        obj2.pop(i)

```

```
[69]: obj2
```

```
[69]: [{ 'id': 1,
        'first_name': 'Adelheid',
        'last_name': 'Tures',
        'email': 'atures0@fotki.com',
        'gender': 'Male'},
       { 'id': 2,
        'first_name': 'Gerick',
        'last_name': 'Frossell',
        'email': 'gfrossell1@house.gov',
        'gender': 'Female'},
       { 'id': 3,
        'first_name': 'Gav',
        'last_name': 'Illyes',
        'email': 'gillyes2@opera.com',
        'gender': 'Male'},
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        'first_name': 'Emmi',
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        'email': 'ehapps3@paginegialle.it',
        'gender': 'Male'},
       { 'id': 5,
        'first_name': 'Arlyn',
        'last_name': 'Kunzler',
        'email': 'akunzler4@abc.net.au',
        'gender': '-'},
       { 'id': 6,
        'first_name': 'Meggy',
        'last_name': 'McGready',
        'email': 'mmcgregady5@cargocollective.com',
        'gender': 'Male'},
       { 'id': 7,
        'first_name': 'Brett',
        'last_name': 'Bottomley',
        'email': 'bbottomley6@state.tx.us',
        'gender': 'Female'},
       { 'id': 8,
        'first_name': 'Tami',
        'last_name': 'Stair',
        'email': 'tstair7@wikipedia.org',
        'gender': 'Female'},
       { 'id': 9,
        'first_name': 'Cthrine',
        'last_name': 'Padrick',
        'email': 'cpadrick8@opera.com',
        'gender': 'Female'},
       { 'id': 10,
        'first_name': 'Rosina',
```

```

    'last_name': 'Byatt',
    'email': 'rbyatt9@intel.com',
    'gender': 'Male'},
{'id': 11,
 'first_name': 'Darryl',
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 'first_name': 'Silvanus',
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 'first_name': 'Amory',
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 'email': 'abrandhardyf@artisteer.com',
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 'first_name': 'Luce',
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 'email': 'rwhitticksh@alibaba.com',
 'gender': 'Male'},
{'id': 19,
 'first_name': 'Sofie',
 'last_name': 'Jirak',
 'email': 'sjiraki@loc.gov',

```

```
    'gender': 'Male'},  
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  'email': 'sheeraned@gmail.com',  
  'gender': 'Male'},  
{ 'id': 21,  
  'first_name': 'Camila',  
  'last_name': 'Cabello',  
  'email': 'cc@gmail.com',  
  'gender': 'Male'}]
```

[]: