

## PYTHON PANDAS AND NUMPY ASSIGNMENT

```

import json
import pandas as pd

[39] with open("req.json") as f:
    data = json.load(f)

[40] df = pd.DataFrame(columns = ["id","email","first_name","user_name"])

[41] for i in range(0,len(data)):
    df.loc[i] = [data[i]["id"],data[i]["email"],data[i]["first_name"],data[i]["last_name"]]
    print(df)

    id      email      first_name  user_name
0 1  george.bluth@reqres.in      George    Bluth
1 2  janet.weaver@reqres.in      Janet     Weaver
2 3  emma.wong@reqres.in        Emma      Wong
3 4  eve.holt@reqres.in         Eve       Holt
4 5  charles.morris@reqres.in    Charles   Morris
5 6  tracey.ramos@reqres.in     Tracey    Ramos

[42] with open("req1.json") as f:
    data1 = json.load(f)

[43] df1 = pd.DataFrame(columns = ["id","email","first_name","user_name"])

[45] for i in range(0,len(data)):
    df1.loc[i] = [data1[i]["id"],data1[i]["email"],data1[i]["first_name"],data1[i]["last_name"]]
    print(df1)

    id      email      first_name  user_name
0 7  michael.lawson@reqres.in    Michael   Lawson
1 8  lindsay.ferguson@reqres.in  Lindsay   Ferguson
2 9  tobias.funke@reqres.in      Tobias     Funke
3 10 byron.fields@reqres.in      Byron     Fields
4 11 george.edwards@reqres.in    George    Edwards
5 12 rachel.howell@reqres.in     Rachel    Howell

[47] print(df)

    id      email      first_name  user_name
0 1  george.bluth@reqres.in      George    Bluth
1 2  janet.weaver@reqres.in      Janet     Weaver
2 3  emma.wong@reqres.in        Emma      Wong
3 4  eve.holt@reqres.in         Eve       Holt
4 5  charles.morris@reqres.in    Charles   Morris
5 6  tracey.ramos@reqres.in     Tracey    Ramos

[48] print(df1)

    id      email      first_name  user_name
0 7  michael.lawson@reqres.in    Michael   Lawson

[48] print(df1)

    id      email      first_name  user_name
0 7  michael.lawson@reqres.in    Michael   Lawson
1 8  lindsay.ferguson@reqres.in  Lindsay   Ferguson
2 9  tobias.funke@reqres.in      Tobias     Funke
3 10 byron.fields@reqres.in      Byron     Fields
4 11 george.edwards@reqres.in    George    Edwards
5 12 rachel.howell@reqres.in     Rachel    Howell

```

### COMPARING TWO DATAFRAMES

```

[50] df.compare(df1)

```

			id	email		first_name	user_name	
	self	other	self		other	self	other	
0	1	7	george.bluth@reqres.in		michael.lawson@reqres.in	George	Michael	Bluth Lawson
1	2	8	janet.weaver@reqres.in		lindsay.ferguson@reqres.in	Janet	Lindsay	Weaver Ferguson
2	3	9	emma.wong@reqres.in		tobias.funke@reqres.in	Emma	Tobias	Wong Funke
3	4	10	eve.holt@reqres.in		byron.fields@reqres.in	Eve	Byron	Holt Fields
4	5	11	charles.morris@reqres.in		george.edwards@reqres.in	Charles	George	Morris Edwards
5	6	12	tracey.ramos@reqres.in		rachel.howell@reqres.in	Tracey	Rachel	Ramos Howell

### APPEND TWO DATAFRAMES

## APPEND TWO DATAFRAMES

```
✓ [52] df2 = df.append(df1)
      print(df2)
```

	id	email	first_name	user_name
0	1	<a href="mailto:george.bluth@reqres.in">george.bluth@reqres.in</a>	George	Bluth
1	2	<a href="mailto:janet.weaver@reqres.in">janet.weaver@reqres.in</a>	Janet	Weaver
2	3	<a href="mailto:emma.wong@reqres.in">emma.wong@reqres.in</a>	Emma	Wong
3	4	<a href="mailto:eve.holt@reqres.in">eve.holt@reqres.in</a>	Eve	Holt
4	5	<a href="mailto:charles.morris@reqres.in">charles.morris@reqres.in</a>	Charles	Morris
5	6	<a href="mailto:tracey.ramos@reqres.in">tracey.ramos@reqres.in</a>	Tracey	Ramos
6	7	<a href="mailto:michael.lawson@reqres.in">michael.lawson@reqres.in</a>	Michael	Lawson
7	8	<a href="mailto:lindsay.ferguson@reqres.in">lindsay.ferguson@reqres.in</a>	Lindsay	Ferguson
8	9	<a href="mailto:tobias.funke@reqres.in">tobias.funke@reqres.in</a>	Tobias	Funke
9	10	<a href="mailto:byron.fields@reqres.in">byron.fields@reqres.in</a>	Byron	Fields
10	11	<a href="mailto:george.edwards@reqres.in">george.edwards@reqres.in</a>	George	Edwards
11	12	<a href="mailto:rachel.howell@reqres.in">rachel.howell@reqres.in</a>	Rachel	Howell

## SORTING APPENDED DATAFRAME BASED ON FIRSTNAME

```
✓ [56] print(df2.sort_values("first_name"))
```

	id	email	first_name	user_name
3	10	<a href="mailto:byron.fields@reqres.in">byron.fields@reqres.in</a>	Byron	Fields
4	5	<a href="mailto:charles.morris@reqres.in">charles.morris@reqres.in</a>	Charles	Morris
2	3	<a href="mailto:emma.wong@reqres.in">emma.wong@reqres.in</a>	Emma	Wong
3	4	<a href="mailto:eve.holt@reqres.in">eve.holt@reqres.in</a>	Eve	Holt

```
✓ [56] 4 5 charles.morris@reqres.in Charles Morris
      2 3 emma.wong@reqres.in Emma Wong
      3 4 eve.holt@reqres.in Eve Holt
      0 1 george.bluth@reqres.in George Bluth
      4 11 george.edwards@reqres.in George Edwards
      1 2 janet.weaver@reqres.in Janet Weaver
      1 8 lindsay.ferguson@reqres.in Lindsay Ferguson
      0 7 michael.lawson@reqres.in Michael Lawson
      5 12 rachel.howell@reqres.in Rachel Howell
      2 9 tobias.funke@reqres.in Tobias Funke
      5 6 tracey.ramos@reqres.in Tracey Ramos
```

## FINAL DATAFRAME WITH ID'S 4-10

```
✓ [69] final_df = df2[3:10]
      #print(final_df.sort_values("first_name"))
      print(final_df)
```

	id	email	first_name	user_name
3	4	<a href="mailto:eve.holt@reqres.in">eve.holt@reqres.in</a>	Eve	Holt
4	5	<a href="mailto:charles.morris@reqres.in">charles.morris@reqres.in</a>	Charles	Morris
5	6	<a href="mailto:tracey.ramos@reqres.in">tracey.ramos@reqres.in</a>	Tracey	Ramos
6	7	<a href="mailto:michael.lawson@reqres.in">michael.lawson@reqres.in</a>	Michael	Lawson
7	8	<a href="mailto:lindsay.ferguson@reqres.in">lindsay.ferguson@reqres.in</a>	Lindsay	Ferguson
8	9	<a href="mailto:tobias.funke@reqres.in">tobias.funke@reqres.in</a>	Tobias	Funke
9	10	<a href="mailto:byron.fields@reqres.in">byron.fields@reqres.in</a>	Byron	Fields