## 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)
                                              email first_name user_name
res.in George Bluth
                 id
                                                       George
                         george.bluth@regres.in
               0 1 1 2
                         janet.weaver@reqres.in
emma.wong@reqres.in
                                                           Janet
                                                                      Weaver
                                                             Emma
                                                                         Wong
                                                                       Holt
                 4
               3
                              eve.holt@regres.in
                                                             Eve
                                                       Charles
                   5 charles.morris@regres.in
                                                                      Morris
                        tracey.ramos@regres.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)):
                                                               completed at E-OF DA
     michael.lawson@reqres.in Michael Lawson tobias.funkc@reqres.in byron.fields@reqres.in Byron fields@reqres.in george.edwards@reqres.in George Edwards rachel.howell@reqres.in Rachel Howell
     [47] print(df)
                     email first_name user_name
george.bluth@reqres.in George Bluth
janet.weaver@reqres.in Janet Weaver
emma.wong@reqres.in Emma Wong
eve.bolt@reqres.in Eve Holt
charles.morris@reqres.in Charles Morris
tracey.ramos@reqres.in Tracey Ramos
     [48] print(df1)
                        email first_name user_namichael.lawson@regres.in Michael Laws
ble
                                                                moleted at 5:25 DM
  [48] print(df1)
                                      email first_name user_name
                   michael.lawson@regres.in
          0
                                              Michael
                                                         Lawson
                                              Lindsay Ferguson
                lindsay.ferguson@regres.in
              9
                     tobias.funke@regres.in
                                               Tobias
                                                          Funke
                                                        Fields
                     byron.fields@regres.in
                                                Byron
                                                       Edwards
          4
             11
                  george.edwards@regres.in
rachel.howell@regres.in
                                               George
                                               Rachel
                                                        Howell
     COMPARING TWO DATAFRAMES
  / [50] df.compare(df1)
                                                                                                         0
                                                                       first_name
                                                                                       user_name
              self other self
                                                                       self other self
                                                other
                                                                                               other
               1 7 george.bluth@reqres.in michael.lawson@reqres.in George Michael
                                                                                         Bluth
                                                                                                Lawson
           1
                       8 janet.weaver@regres.in lindsay.ferguson@regres.in Janet Lindsay Weaver Ferguson
               3 9 emma.wong@reqres.in
                                                                                               Funke
           2
                                                tobias.funke@reqres.in Emma Tobias
                                                                                         Wong
                4
           3
                      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
                                                 rachel.howell@regres.in Tracey Rachel Ramos
                      12 tracey.ramos@regres.in
                                                                                                Howell
     APPEND TWO DATAFRAMES
```

```
APPEND TWO DATAFRAMES
   [52] df2 = df.append(df1)
      print(df2)
                                     email first name user name
             id
                     george.bluth@reqres.in
                                               George
              2
          1
                     janet.weaver@regres.in
                                                Janet
                                                        Weaver
                                                Emma
                       emma.wong@reqres.in
                                                           Wong
                   eve.holt@regres.in
charles.morris@regres.in
              4
                                                  Eve
                                                           Holt
                                              Charles
                                                        Morris
          5
              6
                     tracey.ramos@reqres.in
                                               Tracey
                                                          Ramos
          0
                   michael.lawson@regres.in
                                              Michael
                                                         Lawson
              8 lindsay.ferguson@reqres.in
                                              Lindsay
                                                       Ferguson
                   tobias.funke@regres.in
                                               Tobias
                                                         Funke
              9
                     byron.fields@regres.in
                                                         Fields
             10
                                                Byron
          4
             11
                   george.edwards@regres.in
                                               George
                                                        Edwards
                   rachel.howell@regres.in
                                               Rachel
                                                        Howell
      SORTING APPENDED DATAFRAME BASED ON FIRSTNAME
   [56] print(df2.sort_values("first_name"))
                                     email first_name user_name
                     byron.fields@regres.in
             10
                                                Byron
                                                         Fields
          4 2
                   charles.morris@regres.in
                                             Charles
                                                         Morris
                                               Emma
              3
                       emma.wong@regres.in
                                                           Wong
le
                        eve.holt@regres.in
                                                 Eve
                                                           Holt
                  charles.morris@regres.in
                                              Charles

√ [56] 4

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

Eve

Lindsay Ferguson

Ramos

Lawson

Funke

Fields

Charles

Michael

Tobias

Byron

Tracey

eve.holt@regres.in

charles.morris@regres.in

michael.lawson@regres.in

8 lindsay.ferguson@reqres.in

tracey.ramos@regres.in

tobias.funke@regres.in

byron.fields@regres.in

4

5 6

0

2 9

3 10