merge-multiple-csv-files-with-python

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```
[1]: import os
     import glob
     import pandas as pd
     data_folder = './nhanes_output_data/outputfilestogether'
     os.chdir(data_folder)
[4]: fileTypesToMerge = 'Albumin' # Dem Albumin or Dietary
[5]: extension = 'csv';
     all_filenames = [i for i in glob.glob('*' + fileTypesToMerge + '*.{}'.
     →format(extension))]
     all_filenames
[5]: ['2011-2012-3_Albumin & Creatinine - Urine-ALB_CR_G.XPT.csv',
      '2013-2014-3_Albumin & Creatinine - Urine_ALB_CR_H.XPT.csv',
      '2015-2016-3_Albumin & Creatinine - Urine-ALB_CR_I.XPT.csv',
      '2017-2018-3_Albumin & Creatinine - Urine-ALB_CR_J.XPT.csv']
[6]: row_total_count = 0
     for f in all filenames:
         df_s = pd.read_csv(f)
         row_total_count += df_s.shape[0]
     row_total_count
[6]: 32660
[7]: for f in all_filenames:
       df = pd.read_csv(f)
       print(f);
       print(df.head(1));
    2011-2012-3_Albumin & Creatinine - Urine-ALB_CR_G.XPT.csv
                                    SEQN
                                                                    URXUMA \
    O SEQN - Respondent sequence number URXUMA - Albumin, urine (ug/mL)
                               URXUMS
                                                                    URXUCR \
    O URXUMS - Albumin, urine (mg/L) URXUCR - Creatinine, urine (mg/dL)
```

```
URXCRS \
0 URXCRS - Creatinine, urine (umol/L)
                                    URDACT Unnamed: 6
0 URDACT - Albumin creatinine ratio (mg/g)
                                                   NaN
2013-2014-3_Albumin & Creatinine - Urine_ALB_CR_H.XPT.csv
                               SEQN
                                                              URXUMA \
O SEQN - Respondent sequence number URXUMA - Albumin, urine (ug/mL)
                          URXUMS
                                                              URXUCR \
O URXUMS - Albumin, urine (mg/L) URXUCR - Creatinine, urine (mg/dL)
                               URXCRS \
0 URXCRS - Creatinine, urine (umol/L)
                                    URDACT Unnamed: 6
0 URDACT - Albumin creatinine ratio (mg/g)
2015-2016-3_Albumin & Creatinine - Urine-ALB_CR_I.XPT.csv
                                                              URXUMA \
                               SEQN
O SEQN - Respondent sequence number URXUMA - Albumin, urine (ug/mL)
                                URDUMALC
                                                                  URXUMS \
O URDUMALC - Albumin, urine comment code URXUMS - Albumin, urine (mg/L)
                              URXUCR \
O URXUCR - Creatinine, urine (mg/dL)
                                   URDUCRLC \
O URDUCRLC - Creatinine, urine comment code
                               URXCRS \
0 URXCRS - Creatinine, urine (umol/L)
                                    URDACT Unnamed: 8
0 URDACT - Albumin creatinine ratio (mg/g)
2017-2018-3_Albumin & Creatinine - Urine-ALB_CR_J.XPT.csv
                               SEQN
O SEQN - Respondent sequence number URXUMA - Albumin, urine (ug/mL)
                          URXUMS
O URXUMS - Albumin, urine (mg/L) URDUMALC - Albumin, urine comment code
                              URXUCR
O URXUCR - Creatinine, urine (mg/dL) URXCRS - Creatinine, urine (umol/L)
O URDUCRLC - Creatinine, urine comment code
```

```
[14]: os.listdir('./')
[14]: ['2011-2012-0_Demographic_Variables_Sample_Weights_DEMO_G.XPT.csv',
       '2011-2012-1 Dietary Interview - Individual Foods, First Day-DR1IFF G.XPT.csv',
       '2011-2012-2_Dietary Interview - Individual Foods, Second Day-
      DR2IFF G.XPT.csv',
       '2011-2012-3_Albumin & Creatinine - Urine-ALB_CR_G.XPT.csv',
       '2013-2014-0_Demographic Variables and Sample Weights-DEMO_H.XPT.csv',
       '2013-2014-1_Dietary Interview - Individual Foods, First Day-DR1IFF_H.XPT.csv',
       '2013-2014-2_Dietary Interview - Individual Foods, Second Day-
      DR2IFF H.XPT.csv',
       '2013-2014-3_Albumin & Creatinine - Urine_ALB_CR_H.XPT.csv',
       '2015-2016-0 Demographic Variables and Sample Weights-DEMO_I.XPT.csv',
       '2015-2016-1_Dietary Interview - Individual Foods, First Day_DR1IFF_I.XPT.csv',
       '2015-2016-2_Dietary Interview - Individual Foods, First Day-DR2IFF_I.XPT.csv',
       '2015-2016-3_Albumin & Creatinine - Urine-ALB_CR_I.XPT.csv',
       '2017-2018-0 demographics-DEMO J.XPT.csv',
       '2017-2018-1_Dietary Interview - Individual Foods, First Day_DR1IFF_J.XPT.csv',
       '2017-2018-2_Dietary Interview - Individual Foods, Second
      Day DR2IFF J.XPT.csv',
       '2017-2018-3_Albumin & Creatinine - Urine-ALB_CR_J.XPT.csv',
       'all-merged.csv']
[16]: #combine all files in the list
      combined_csv = pd.concat([pd.read_csv(f) for f in all_filenames])
      #export to csv
      combined_csv.to_csv( "../merged_files/" + fileTypesToMerge + "-all-merged.csv", u
       →index=False, encoding='utf-8-sig')
[17]: df = pd.read_csv('./all-merged.csv')
      df.tail()
      df.head()
Γ17]:
                                      SEON
                                                                      URXUMA \
      O SEQN - Respondent sequence number
                                            URXUMA - Albumin, urine (ug/mL)
      1
                                   62161.0
                                                                         5.2
      2
                                   62163.0
                                                                        21.4
      3
                                                                        14.2
                                   62164.0
      4
                                   62165.0
                                                                        25.5
                                                                      URXUCR \
                                 URXUMS
```

URDACT Unnamed: 8

NaN

0 URDACT - Albumin creatinine ratio (mg/g)

```
URXUMS - Albumin, urine (mg/L) URXUCR - Creatinine, urine (mg/dL)
       1
                                         5.2
                                                                                 134.0
       2
                                        21.4
                                                                                 182.0
       3
                                        14.2
                                                                                 166.0
       4
                                        25.5
                                                                                  41.0
                                            URXCRS \
         URXCRS - Creatinine, urine (umol/L)
                                           11845.6
       1
      2
                                           16088.8
       3
                                           14674.4
       4
                                            3624.4
                                                  URDACT Unnamed: 6 URDUMALC URDUCRLC \
      0
         URDACT - Albumin creatinine ratio (mg/g)
                                                                   {\tt NaN}
                                                                              {\tt NaN}
                                                                                        NaN
                                                    3.88
       1
                                                                   NaN
                                                                              NaN
                                                                                        NaN
       2
                                                   11.76
                                                                   {\tt NaN}
                                                                                        NaN
                                                                              NaN
       3
                                                    8.55
                                                                   {\tt NaN}
                                                                              {\tt NaN}
                                                                                        NaN
       4
                                                    62.2
                                                                                        NaN
                                                                   {\tt NaN}
                                                                              {\tt NaN}
          Unnamed: 8
      0
                  NaN
       1
                  {\tt NaN}
      2
                  NaN
       3
                  NaN
       4
                  NaN
[18]: df.shape
[18]: (32660, 10)
 []:
```