Task

May 16, 2022

```
[1]: import pandas as pd
import numpy as np
import warnings
warnings.filterwarnings('ignore')
```

0.0.1 1. Read csv file

```
[2]: data = pd.read_csv("/home/user/INTERVIEWS/Python/input.csv")
data
```

```
[2]:
             Ιd
                          dob first_name \
     0
          10.0
                 21-08-1992
                                      liam
     1
           6.0
                    1-8-1999
                                   olivia
     2
           2.0
                 22-03-1976
                                      noah
     3
           7.0
                   10-6-2002
                                  oliver
     4
           9.0
                 11-11-2020
                                   Elijah
     5
           1.0
                 12-12-1996
                                       NaN
     6
           4.0
                 30-07-2021
                                  William
     7
           6.0
                    1-8-1999
                                    olivia
     8
           NaN
                          NaN
                                       NaN
     9
           NaN
                          NaN
                                       NaN
     10
           {\tt NaN}
                          NaN
                                       NaN
     11
                          NaN
           NaN
                                       NaN
     12
           {\tt NaN}
                          NaN
                                       NaN
     13
           NaN
                          NaN
                                       NaN
     14
           NaN
                          NaN
                                       NaN
     15
           {\tt NaN}
                          NaN
                                       NaN
     16
           {\tt NaN}
                          NaN
                                       NaN
     17
                          NaN
                                       NaN
           {\tt NaN}
     18
           4.0
                     William
                                       Mia
```

| | url | last_name | Unnamed: 5 |
|---|--|-----------|------------|
| 0 | https://im.rediff.com/money/2020/nov/15car-saf | Emma | NaN |
| 1 | https://i0.wp.com/gomechanic.in/blog/wp-conten | charlotte | NaN |
| 2 | https://i0.wp.com/gomechanic.in/blog/wp-conten | Amelia | NaN |
| 3 | NaN | NaN | NaN |

| 4 | NaN | sophia | NaN |
|----|--|------------|-----|
| 5 | https://1000logos.net/wp-content/uploads/2016/ | isabella | NaN |
| 6 | NaN | mia | NaN |
| 7 | https://i0.wp.com/gomechanic.in/blog/wp-conten | charlotte | NaN |
| 8 | NaN | NaN | NaN |
| 9 | NaN | NaN | NaN |
| 10 | NaN | NaN | NaN |
| 11 | NaN | NaN | NaN |
| 12 | NaN | NaN | NaN |
| 13 | NaN | NaN | NaN |
| 14 | NaN | NaN | NaN |
| 15 | NaN | NaN | NaN |
| 16 | NaN | NaN | NaN |
| 17 | NaN | NaN | NaN |
| 18 | William Mia | 30-07-2021 | 0.0 |

0.0.2 2. Print total number of rows CSV files in th

0.0.3 Answer: 19

```
[3]: data.shape[0]
```

[3]: 19

0.0.4 3. No Duplicate records need to be processed

```
[4]: data=data.drop_duplicates()
```

0.0.5 4. Print how many rows exist excluding the duplicate records.

0.0.6 Answer: 10

```
[5]: data.shape[0]
```

[5]: 10

0.0.7 5. The first_name and last_name should start with a capital letter.

```
[6]: data['first_name']=data['first_name'].str.title()
   data['last_name']=data['last_name'].str.title()
   data
```

```
[6]:
           Ιd
                       dob first_name \
         10.0
     0
                21-08-1992
                                  Liam
     1
          6.0
                  1-8-1999
                                Olivia
     2
          2.0
                22-03-1976
                                  Noah
     3
          7.0
                 10-6-2002
                               Oliver
     4
          9.0
                11-11-2020
                                Elijah
     5
          1.0
                12-12-1996
                                   NaN
          4.0
     6
                30-07-2021
                               William
     7
          6.0
                  1-8-1999
                                Olivia
     8
          NaN
                       NaN
                                   NaN
     18
          4.0
                   William
                                   Mia
                                                                             Unnamed: 5
                                                                  last_name
                                                           url
         https://im.rediff.com/money/2020/nov/15car-saf...
     0
                                                                     Emma
                                                                                   NaN
         https://i0.wp.com/gomechanic.in/blog/wp-conten...
     1
                                                                Charlotte
                                                                                   NaN
         https://i0.wp.com/gomechanic.in/blog/wp-conten...
     2
                                                                   Amelia
                                                                                   NaN
     3
                                                           NaN
                                                                        NaN
                                                                                     NaN
     4
                                                           NaN
                                                                     Sophia
                                                                                     NaN
     5
         https://1000logos.net/wp-content/uploads/2016/...
                                                                 Isabella
                                                                                   NaN
     6
                                                           NaN
                                                                        Mia
                                                                                     NaN
     7
         https://i0.wp.com/gomechanic.in/blog/wp-conten...
                                                                Charlotte
                                                                                   NaN
     8
                                                           NaN
                                                                        NaN
                                                                                     NaN
                                                                                     0.0
     18
                                                  William Mia 30-07-2021
```

0.0.8 6. The first_name and last_name columns in the CSV file have to be concatenated to form the full name, which must be fully capitalized.

```
[7]: data['full_name']=data['first_name'] +" "+ data['last_name']
     data['full_name']
[7]: 0
                    Liam Emma
     1
            Olivia Charlotte
     2
                 Noah Amelia
     3
                          NaN
     4
               Elijah Sophia
     5
                          NaN
     6
                 William Mia
     7
            Olivia Charlotte
     8
                          NaN
              Mia 30-07-2021
```

Name: full_name, dtype: object

0.0.9 9. Sort the row in ascending order according to the column "Id".

```
[8]: data.sort_values("Id")
     data
[8]:
            Ιd
                        dob first name \
         10.0
     0
                21-08-1992
                                   Liam
     1
           6.0
                                 Olivia
                  1-8-1999
     2
           2.0
                22-03-1976
                                   Noah
     3
           7.0
                 10-6-2002
                                Oliver
     4
           9.0
                11-11-2020
                                 Elijah
     5
                12-12-1996
                                    NaN
           1.0
     6
           4.0
                30-07-2021
                                William
     7
           6.0
                  1-8-1999
                                 Olivia
     8
           NaN
                        NaN
                                    NaN
     18
           4.0
                   William
                                    Mia
                                                            url
                                                                   last_name
                                                                               Unnamed: 5 \
     0
         https://im.rediff.com/money/2020/nov/15car-saf...
                                                                      Emma
                                                                                     NaN
         https://i0.wp.com/gomechanic.in/blog/wp-conten...
     1
                                                                 Charlotte
                                                                                     NaN
     2
         https://i0.wp.com/gomechanic.in/blog/wp-conten...
                                                                    Amelia
                                                                                     {\tt NaN}
     3
                                                            \mathtt{NaN}
                                                                          NaN
                                                                                       NaN
     4
                                                            NaN
                                                                      Sophia
                                                                                       NaN
     5
         https://1000logos.net/wp-content/uploads/2016/...
                                                                  Isabella
                                                                                     NaN
     6
                                                            NaN
                                                                          Mia
                                                                                       NaN
     7
         https://i0.wp.com/gomechanic.in/blog/wp-conten...
                                                                 Charlotte
                                                                                     NaN
     8
                                                            NaN
                                                                          NaN
                                                                                       NaN
     18
                                                   William Mia
                                                                  30-07-2021
                                                                                       0.0
                  full_name
     0
                  Liam Emma
     1
           Olivia Charlotte
     2
                Noah Amelia
     3
                         NaN
     4
              Elijah Sophia
     5
                         NaN
     6
                William Mia
     7
           Olivia Charlotte
     8
                         NaN
     18
             Mia 30-07-2021
```

0.0.10 10. Then, save all of the data to a CSV file named "assignment1.csv".

```
[9]: data.to_csv('/home/user/INTERVIEWS/assignment1.csv', index=False)
```