## ds-csv-file

## August 29, 2024

import pandas as pd

```
df=pd.read_csv("SAMPLEIDs.csv")
     df
                 REGNO
                             NAME
                                                 GENDER
                                                                                  M2
[1]:
         SNO
                                            DOB
                                                               ADDRESS
                                                                           M1
                                                                                        МЗ
            1
               1220121
                             ARUN
                                    2000-02-10
                                                    MALE
                                                             THANDALAM
                                                                         82.0
                                                                               81.0
                                                                                      90.0
     1
               1220122
                             BABU
                                    1999-01-25
                                                    MALE
                                                          KANCHIPURAM
                                                                         56.0
                                                                               61.0
                                                                                      80.0
     2
               1220123
                           CHARAN
                                    2000.09.21
                                                    MALE
                                                             THANDALAM
                                                                          NaN
                                                                               59.0
                                                                                      60.0
     3
            4
               1220124
                             DEVA
                                    2000-11-09
                                                    MALE
                                                           POONAMALEE
                                                                         74.0
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               1220125
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                                    2000-11-21
                                                 FEMALE
                                                               CHITHUR
                                                                         92.0
                                                                               95.0
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     5
               1220126
                          FARHANA
                                    1999-03-05
                                                 FEMALE
                                                            THANDALAM
                                                                         91.0
                                                                               88.0
                                                                                      90.0
     6
                                    2000-10-02
                                                    MALE
                                                          KANCHIPURAM
                                                                         49.0
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                                                                                      70.0
               1220127
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                                                    MALE
                                                          KANCHIPURAM
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            8
                             HEMA
                                    1999-01-25
                                                                         95.0
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               1220128
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                                                           POONAMALEE
     9
               1220129
                            INDRA
                                    2000.09.21
                                                 FEMALE
                                                          KANCHIPURAM
                                                                         64.0
                                                                                 NaN
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     10
           10
               1220130
                           JAHITH
                                    2000-11-09
                                                    MALE
                                                            THANDALAM
                                                                         34.0
                                                                               45.0
                                                                                      50.0
     11
               1220131
                             KANI
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                                                 FEMALE
                                                               CHITHUR
                                                                         96.0
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               1220132
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                                                    MALE
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     12
           12
                         LATHESSH
                                                            THANDALAM
                                                                          NaN
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     13
           13
               1220133
                             MANI
                                    2000-10-02
                                                    MALE
                                                          KANCHIPURAM
                                                                         71.0
                                                                               76.0
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                                                           POONAMALEE
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                                      20000921
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                                      20001109
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     1
         56.0
                253.0
                         84.333333
     2
         70.0
                  NaN
                          0.000000
     3
         74.0
                307.0
                        102.333333
     4
         92.0
                375.0
                        125.000000
     5
         91.0
                360.0
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     6
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                219.0
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                219.0
                         73.000000
         95.0
                376.0
                        125.333333
```

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9
         64.0
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                         0.000000
         34.0
               163.0
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                208.0
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     18
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                       112.666667
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         84.0
                  NaN
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         76.0
              301.0 100.333333
[2]: import pandas as pd
     df=pd.read csv("SAMPLEIDs.csv")
     x=df.dropna(how='any')
     x
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                383.0
                      127.666667
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               346.0
                       115.333333
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         81.0
                338.0
                       112.666667
         76.0
               301.0
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                       100.333333
```

```
[3]: import pandas as pd
     df=pd.read_csv("SAMPLEIDs.csv")
     df.nunique()
[3]: SNO
                20
     REGNO
                20
     NAME
                19
     DOB
                13
     GENDER.
                 2
     ADDRESS
                 4
     М1
                17
     M2
                17
                 6
     МЗ
     М4
                16
     TOTAL
                15
     AVG
                15
     dtype: int64
[4]: import pandas as pd
     df=pd.read csv("SAMPLEIDs.csv")
     x2=df.dropna(how="all").shape
     x2
[4]: (21, 12)
[7]: import pandas as pd
     df=pd.read_csv("SAMPLEIDs.csv")
     tot=df.dropna(subset=['TOTAL'],how='any')
     tot
[7]:
                REGNO
         SNO
                            NAME
                                         DOB
                                             GENDER
                                                           ADDRESS
                                                                      M1
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                           RATHI
     20
              1220140
                       SANTHOSH
                                    20001002
                                                 MALE
                                                       KANCHIPURAM
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         56.0
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                        84.333333
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         74.0
                307.0
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     4
         92.0
                375.0
                       125.000000
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                219.0
                        73.000000
     6
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         49.0
                219.0
                        73.000000
         95.0
                376.0
                       125.333333
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         96.0
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                383.0
                       127.666667
         70.0
     12
                208.0
                        69.333333
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         79.0
                315.0
                       105.000000
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                         0.000000
     16
         86.0
                346.0
                       115.333333
     17
          {\tt NaN}
                201.0
                        67.000000
         81.0
                338.0
     18
                       112.666667
     20
         76.0
                301.0
                       100.333333
[8]: import pandas as pd
     df=pd.read_csv("SAMPLEIDs.csv")
     tot=df.dropna(subset=['M1','M2','M3','M4'],how='any')
     tot
[8]:
         SNO
                 REGNO
                             NAME
                                           DOB
                                                GENDER
                                                             ADDRESS
                                                                         M1
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                                                                       56.0
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     1
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                                                  MALE
                                                         KANCHIPURAM
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               1220124
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                                                FEMALE
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                                                                       92.0
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     5
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                                                           THANDALAM
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                                                                             45.0
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               1220130
                           JAHITH
     11
               1220131
                             KANI
                                   2000-11-21
                                                FEMALE
                                                             CHITHUR
                                                                       96.0
                                                                             95.0
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          16
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                         PRATHAP
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                                                  MALE
                                                         KANCHIPURAM
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                                                                             86.0
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               1220140
                        SANTHOSH
                                     20001002
                                                  MALE
                                                         KANCHIPURAM
                                                                       76.0
                                                                             69.0
                                                                                    80.0
           M4
                TOTAL
                               AVG
     1
         56.0
                253.0
                        84.333333
         74.0
     3
                307.0
                       102.333333
         92.0
                375.0
     4
                       125.000000
     5
         91.0
                360.0
                       120.000000
         49.0
                219.0
                        73.000000
     6
     7
         49.0
                219.0
                        73.000000
     8
         95.0
                376.0
                       125.333333
```

TOTAL

AVG

M4

```
10 34.0 163.0
                        54.333333
      11 96.0 383.0 127.666667
      14 79.0
               315.0 105.000000
      16 86.0 346.0 115.333333
      18 81.0 338.0 112.666667
      20 76.0 301.0 100.333333
[10]: import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      df.isna().sum()
[10]: SNO
                 0
     REGNO
                 0
     NAME
                 1
     DOB
                 0
      GENDER
                 1
      ADDRESS
                 1
     M1
                 3
     M2
                 2
     МЗ
                 4
                 3
     M4
      TOTAL
                 5
      AVG
                 1
      dtype: int64
[11]: import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      df['M1']
[11]: 0
            82.0
            56.0
      1
      2
             {\tt NaN}
      3
            74.0
      4
            92.0
      5
            91.0
      6
            49.0
      7
            49.0
      8
            95.0
            64.0
      9
      10
            34.0
            96.0
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            {\tt NaN}
      13
            71.0
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            86.0
      17
            67.0
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18
            81.0
            84.0
      19
      20
            76.0
      Name: M1, dtype: float64
[14]: import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      df.isnull()
[14]:
            SNO
                 REGNO
                          NAME
                                   DOB
                                        GENDER
                                                 ADDRESS
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      import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      ~df.isnull()
[15]:
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[16]: import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      df.notnull()
[16]:
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True

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           True
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      19
          False
                   True
      20
           True
                   True
[17]: import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      xl=df.dropna(axis=0)
      xl
Γ17]:
          SNO
                  REGNO
                              NAME
                                           DOB
                                                 GENDER
                                                              ADDRESS
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                                                                                       МЗ
                                                                          M1
                                                                       56.0
      1
            2
                1220122
                              BABU
                                    1999-01-25
                                                   MALE
                                                         KANCHIPURAM
                                                                              61.0
                                                                                    80.0
                                                                              79.0
      3
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                              DEVA
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                                                           POONAMALEE
                                                                       74.0
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      4
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                1220125
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                                    2000-11-21
                                                 FEMALE
                                                              CHITHUR
                                                                       92.0
                                                                              95.0
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                1220126
                          FARHANA
                                    1999-03-05
                                                 FEMALE
                                                            THANDALAM
                                                                       91.0
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                              GANI
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                                                   MALE
                                                          KANCHIPURAM
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                                                          KANCHIPURAM
                                                                                    90.0
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                                    1999-01-25
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                                                           POONAMALEE
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                                                            THANDALAM
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                                                 FEMALE
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      1
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          74.0
                 307.0
                        102.333333
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          34.0
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      11
          96.0
                 383.0
                       127.666667
      14
          79.0
                 315.0
                        105.000000
      16
          86.0
                 346.0
                        115.333333
                 338.0
      18
          81.0
                        112.666667
```

9

True

False

True

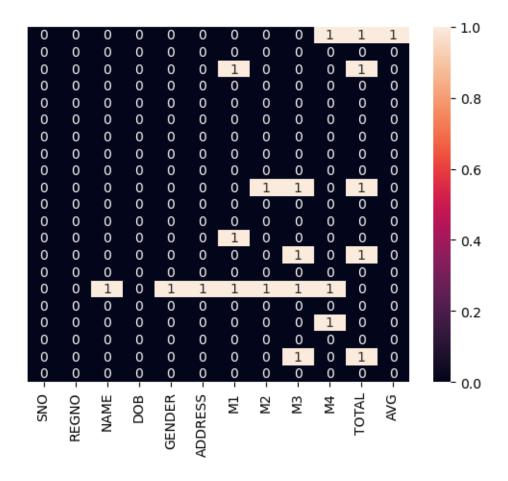
True

## 20 76.0 301.0 100.333333

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[18]: import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      df.duplicated()
[18]: 0
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            False
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            False
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            False
      18
            False
      19
            False
      20
            False
      dtype: bool
[19]: import pandas as pd
      df=pd.read_csv("SAMPLEIDs.csv")
      m=df.drop_duplicates(inplace=False)
[19]:
                                           DOB GENDER
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          SNO
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                                                  MALE
                                                           THANDALAM
                                                                      82.0
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                                   2000-11-09
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                                                          POONAMALEE
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                                   2000.09.21
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                           JAHITH
                                   2000-11-09
                                                  MALE
                                                           THANDALAM
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                                                             CHITHUR
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```

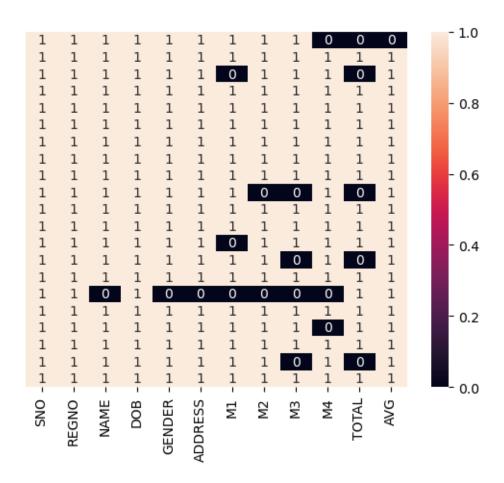
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          84.0
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          76.0
                301.0
                        100.333333
[25]: import seaborn as sns
      sns.heatmap(df.isnull(),yticklabels=False,annot=True)
```

[25]: <Axes: >



```
[26]: import seaborn as sns
sns.heatmap(df.notnull(),yticklabels=False,annot=True)
```

[26]: <Axes: >



```
[28]: import seaborn as sns
      df.dtypes
[28]: SNO
                    int64
      REGNO
                    int64
      NAME
                   object
      DOB
                   object
      GENDER
                   object
      ADDRESS
                   object
      М1
                  float64
      M2
                  float64
      МЗ
                  float64
                  float64
      M4
      TOTAL
                  float64
      AVG
                  float64
      dtype: object
[]:
```