In [59]:
```
from io import BytesIO
from zipfile import ZipFile
import pandas as pd
import numpy as np
import os
import datetime
```

In [60]:
```
path = "/home/nacho/Documents/coronavirus/COVID-19_Paper/prediction_data"
os.chdir(os.path.join(path))
```

In [61]:
```
def print_values(df):
    for i in df[df.columns]:
        #x = df[i].value_counts()
        x = (df[i].value_counts()/df[i].count())*100
        print(i,"\n",x)
        print()
    print(df.shape)
```

In [62]:
```
#CASO 1 - si el paciente contagiado de CoV-2 necesitará hospitalizaci
ón

df = pd.read_csv("df_caso1.zip")
print_values(df)
```

```
SEXO
 0    50.119343
1    49.880657
Name: SEXO, dtype: float64

TIPO_PACIENTE
 0    81.163394
1    18.836606
Name: TIPO_PACIENTE, dtype: float64

EDAD
 30     2.271840
31     2.223502
29     2.214040
28     2.200095
32     2.169334
         ...
117    0.000179
114    0.000179
113    0.000135
119    0.000045
111    0.000045
Name: EDAD, Length: 122, dtype: float64

EMBARAZO
 0    99.367526
1     0.632474
Name: EMBARAZO, dtype: float64

DIABETES
 0    86.635583
1    13.364417
Name: DIABETES, dtype: float64

EPOC
 0    98.886568
1     1.113432
Name: EPOC, dtype: float64

ASMA
 0    97.797573
1     2.202427
Name: ASMA, dtype: float64

INMUSUPR
 0    99.175385
1     0.824615
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    82.621604
1    17.378396
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    98.44897
1     1.55103
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    85.393414
1    14.606586
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    98.501971
1     1.498029
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.710159
1     7.289841
Name: TABAQUISMO, dtype: float64

(2230131, 13)
```

In [63]:
```
#CASO 1.2: si el paciente contagiado de CoV-2 necesitará hospitalizac
ión crítica
'''
TIPO_PACIENTE
1 100.0
'''
df = pd.read_csv("df_caso0.zip")
print_values(df)
```

```
SEXO
 0    59.363903
1    40.636097
Name: SEXO, dtype: float64

EDAD
 60     2.519420
61     2.479646
63     2.472937
56     2.468384
59     2.467426
         ...
115    0.000240
110    0.000240
109    0.000240
106    0.000240
118    0.000240
Name: EDAD, Length: 114, dtype: float64

EMBARAZO
 0    99.358584
1     0.641416
Name: EMBARAZO, dtype: float64

DIABETES
 0    67.527638
1    32.472362
Name: DIABETES, dtype: float64

EPOC
 0    96.529598
1     3.470402
Name: EPOC, dtype: float64

ASMA
 0    97.989975
1     2.010025
Name: ASMA, dtype: float64

INMUSUPR
 0    97.948045
1     2.051955
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    61.580945
1    38.419055
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.838585
1     4.161415
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    78.65861
1    21.34139
```

```
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.789605
1     5.210395
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.527998
1     7.472002
Name: TABAQUISMO, dtype: float64

hosp_critica
 0    83.091255
1    16.908745
Name: hosp_critica, dtype: float64

(417358, 13)
```

In [64]:
```
#CASO 2: predecir en base a los descriptores la mortalidad (sin filtr
o)

df = pd.read_csv("df_caso2.zip")
print_values(df)
```

```
SEXO
 0    50.119343
1    49.880657
Name: SEXO, dtype: float64

TIPO_PACIENTE
 0    81.163394
1    18.836606
Name: TIPO_PACIENTE, dtype: float64

EDAD
 30     2.271840
31     2.223502
29     2.214040
28     2.200095
32     2.169334
         ...
117    0.000179
114    0.000179
113    0.000135
119    0.000045
111    0.000045
Name: EDAD, Length: 122, dtype: float64

EMBARAZO
 0    99.367526
1     0.632474
Name: EMBARAZO, dtype: float64

DIABETES
 0    86.635583
1    13.364417
Name: DIABETES, dtype: float64

EPOC
 0    98.886568
1     1.113432
Name: EPOC, dtype: float64

ASMA
 0    97.797573
1     2.202427
Name: ASMA, dtype: float64

INMUSUPR
 0    99.175385
1     0.824615
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    82.621604
1    17.378396
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    98.44897
1     1.55103
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    85.393414
1    14.606586
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    98.501971
1     1.498029
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.710159
1     7.289841
Name: TABAQUISMO, dtype: float64

BOOL_DEF
 0    90.829552
1     9.170448
Name: BOOL_DEF, dtype: float64

(2230131, 14)
```

In [47]:
```
#CASO 3: Mortalidad de los contagiagos DESPUES de INTUBADO,UCI (sin f
iltro)
'''
TIPO_PACIENTE
1 100.0
'''

df = pd.read_csv("df_caso3.zip")
print_values(df)
```

```
SEXO
 0    59.363903
1    40.636097
Name: SEXO, dtype: float64

INTUBADO
 0    86.908362
1    13.091638
Name: INTUBADO, dtype: float64

EDAD
 60     2.519420
61     2.479646
63     2.472937
56     2.468384
59     2.467426
         ...
115    0.000240
110    0.000240
109    0.000240
106    0.000240
118    0.000240
Name: EDAD, Length: 114, dtype: float64

EMBARAZO
 0    99.358584
1     0.641416
Name: EMBARAZO, dtype: float64

DIABETES
 0    67.527638
1    32.472362
Name: DIABETES, dtype: float64

EPOC
 0    96.529598
1     3.470402
Name: EPOC, dtype: float64

ASMA
 0    97.989975
1     2.010025
Name: ASMA, dtype: float64

INMUSUPR
 0    97.948045
1     2.051955
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    61.580945
1    38.419055
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.838585
1     4.161415
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    78.65861
1    21.34139
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.789605
1     5.210395
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.527998
1     7.472002
Name: TABAQUISMO, dtype: float64

UCI
 0    92.037052
1     7.962948
Name: UCI, dtype: float64

BOOL_DEF
 0    55.602145
1    44.397855
Name: BOOL_DEF, dtype: float64

(417358, 15)
```

In [65]:
```
#CASO 3.1: Mortalidad de los contagiagos DESPUES de INTUBADO,UCI (con
filtro)
'''
INTUBADO
1
100.0
Name: INTUBADO, dtype: float64
UCI
1
100.0
Name: UCI, dtype: float64
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
'''
df = pd.read_csv("df_caso_3_1.zip")
print_values(df)
```

```
SEXO
 0    65.531989
1    34.468011
Name: SEXO, dtype: float64

EDAD
 60     2.901231
61     2.750968
67     2.658499
65     2.641160
66     2.623822
         ...
7      0.023117
101    0.011559
98     0.011559
100    0.005779
116    0.005779
Name: EDAD, Length: 102, dtype: float64

EMBARAZO
 0    99.341155
1     0.658845
Name: EMBARAZO, dtype: float64

DIABETES
 0    66.346876
1    33.653124
Name: DIABETES, dtype: float64

EPOC
 0    96.971623
1     3.028377
Name: EPOC, dtype: float64

ASMA
 0    98.092816
1     1.907184
Name: ASMA, dtype: float64

INMUSUPR
 0    97.468647
1     2.531353
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    61.544241
1    38.455759
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.133792
1     4.866208
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    71.941282
1    28.058718
```

```
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    95.688609
1     4.311391
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.140091
1     7.859909
Name: TABAQUISMO, dtype: float64

BOOL_DEF
 1    76.420274
0    23.579726
Name: BOOL_DEF, dtype: float64

(17303, 13)
```

In [66]:
```
#CASO 3.2: Mortalidad de los contagiagos DESPUES de INTUBADO,UCI (fil
tro solo INTUBADO)
'''
INTUBADO
1
100.0
Name: INTUBADO, dtype: float64
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
'''
df = pd.read_csv("df_caso_3_2.zip")
print_values(df)
```

```
SEXO
 0    63.807903
1    36.192097
Name: SEXO, dtype: float64

EDAD
 63     2.931972
61     2.888047
60     2.869745
65     2.834971
67     2.794707
         ...
100    0.010981
99     0.007321
101    0.003660
116    0.001830
108    0.001830
Name: EDAD, Length: 104, dtype: float64

EMBARAZO
 0    99.685207
1     0.314793
Name: EMBARAZO, dtype: float64

DIABETES
 0    64.710189
1    35.289811
Name: DIABETES, dtype: float64

EPOC
 0    96.271894
1     3.728106
Name: EPOC, dtype: float64

ASMA
 0    97.977635
1     2.022365
Name: ASMA, dtype: float64

INMUSUPR
 0    97.604275
1     2.395725
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    57.788393
1    42.211607
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.29823
1     4.70177
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    73.776972
1    26.223028
```

```
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.73453
1     5.26547
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    91.659803
1     8.340197
Name: TABAQUISMO, dtype: float64

UCI
 0    68.332144
1    31.667856
Name: UCI, dtype: float64

BOOL_DEF
 1    83.017625
0    16.982375
Name: BOOL_DEF, dtype: float64

(54639, 14)
```

In [67]:
```
#CASO 3.3: Mortalidad de los contagiagos DESPUES de INTUBADO,UCI (filtro solo UCI)
'''
UCI
1
100.0
Name: UCI, dtype: float64
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
'''
df = pd.read_csv("df_caso_3_3.zip")
print_values(df)
```

```
SEXO
 0    62.878378
1    37.121622
Name: SEXO, dtype: float64

INTUBADO
 1    52.064151
0    47.935849
Name: INTUBADO, dtype: float64

EDAD
 60     2.867545
61     2.647891
58     2.641873
65     2.494433
55     2.491424
         ...
98     0.018054
99     0.015045
101    0.015045
103    0.006018
116    0.003009
Name: EDAD, Length: 104, dtype: float64

EMBARAZO
 0    99.103328
1     0.896672
Name: EMBARAZO, dtype: float64

DIABETES
 0    66.507191
1    33.492809
Name: DIABETES, dtype: float64

EPOC
 0    96.762352
1     3.237648
Name: EPOC, dtype: float64

ASMA
 0    97.996028
1     2.003972
Name: ASMA, dtype: float64

INMUSUPR
 0    97.634952
1     2.365048
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    62.117109
1    37.882891
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.284949
1     4.715051
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    73.289402
1    26.710598
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    96.046218
1     3.953782
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.751399
1     7.248601
Name: TABAQUISMO, dtype: float64

BOOL_DEF
 1    56.312812
0    43.687188
Name: BOOL_DEF, dtype: float64

(33234, 14)
```

In [17]:

```
'''CASO 5 -Necesidad de ICU '''
'''
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64}

'''
df = pd.read_csv("df_caso5.zip")
print_values(df)
```

```
SEXO
 0    59.366202
1    40.633798
Name: SEXO, dtype: float64

NEUMONIA
 1    65.745186
0    34.254814
Name: NEUMONIA, dtype: float64

EDAD
 60     2.519364
61     2.480036
63     2.473562
59     2.467327
56     2.466608
         ...
115    0.000240
110    0.000240
109    0.000240
106    0.000240
118    0.000240
Name: EDAD, Length: 114, dtype: float64

EMBARAZO
 0    99.358289
1     0.641711
Name: EMBARAZO, dtype: float64

DIABETES
 0    67.521163
1    32.478837
Name: DIABETES, dtype: float64

EPOC
 0    96.528381
1     3.471619
Name: EPOC, dtype: float64

ASMA
 0    97.989976
1     2.010024
Name: ASMA, dtype: float64

INMUSUPR
 0    97.947531
1     2.052469
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    61.575981
1    38.424019
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.838469
1     4.161531
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    78.658545
1    21.341455
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.788374
1     5.211626
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.528477
1     7.471523
Name: TABAQUISMO, dtype: float64

UCI
 0    92.046474
1     7.953526
Name: UCI, dtype: float64

(417010, 14)
```

In [68]:
```
#CASO 5.1: Necesidad de ICU DESPUES de diagnostico de neumonia (con f
iltro)
'''
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
NEUMONIA
1
100.0
Name: NEUMONIA, dtype: float64
'''
df = pd.read_csv("df_caso5_1.zip")
print_values(df)
```

```
SEXO
 0    60.443549
1    39.556451
Name: SEXO, dtype: float64

EDAD
 60     2.628060
63     2.591255
65     2.576679
61     2.561739
59     2.541697
         ...
116    0.000364
110    0.000364
108    0.000364
104    0.000364
118    0.000364
Name: EDAD, Length: 110, dtype: float64

EMBARAZO
 0    99.660014
1     0.339986
Name: EMBARAZO, dtype: float64

DIABETES
 0    66.272506
1    33.727494
Name: DIABETES, dtype: float64

EPOC
 0    96.454379
1     3.545621
Name: EPOC, dtype: float64

ASMA
 0    98.094183
1     1.905817
Name: ASMA, dtype: float64

INMUSUPR
 0    97.97466
1     2.02534
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    60.533191
1    39.466809
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.783881
1     4.216119
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    77.413701
1    22.586299
```

```
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.921708
1     5.078292
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.35669
1     7.64331
Name: TABAQUISMO, dtype: float64

UCI
 0    89.556998
1    10.443002
Name: UCI, dtype: float64

(274423, 13)
```

In [19]:
```
#CASO 6: necesidad de ventilador ANTES de DIAGNOSTICO de neumonia e I
CU (sin filtro)
'''
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
'''
df = pd.read_csv("df_caso6.zip")
print_values(df)
```

```
SEXO
 0    59.366262
1    40.633738
Name: SEXO, dtype: float64

INTUBADO
 0    86.912076
1    13.087924
Name: INTUBADO, dtype: float64

EDAD
 60     2.519316
61     2.479989
63     2.473514
59     2.467280
56     2.466800
         ...
115    0.000240
110    0.000240
109    0.000240
106    0.000240
118    0.000240
Name: EDAD, Length: 114, dtype: float64

EMBARAZO
 0    99.358301
1     0.641699
Name: EMBARAZO, dtype: float64

DIABETES
 0    67.521066
1    32.478934
Name: DIABETES, dtype: float64

EPOC
 0    96.528447
1     3.471553
Name: EPOC, dtype: float64

ASMA
 0    97.990015
1     2.009985
Name: ASMA, dtype: float64

INMUSUPR
 0    97.947571
1     2.052429
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    61.57552
1    38.42448
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.838549
1     4.161451
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    78.658715
1    21.341285
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.788474
1     5.211526
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.52838
1     7.47162
Name: TABAQUISMO, dtype: float64

(417018, 13)
```

In [69]:
```
#CASO 7: necesidad de ventilador DESPUES de DIAGNOSTICO de neumonia e
ICU (sin filtro)
'''
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
'''
df = pd.read_csv("df_caso7.zip")
print_values(df)
```

```
SEXO
 0    59.363903
1    40.636097
Name: SEXO, dtype: float64

INTUBADO
 0    86.908362
1    13.091638
Name: INTUBADO, dtype: float64

NEUMONIA
 1    65.752424
0    34.247576
Name: NEUMONIA, dtype: float64

EDAD
 60     2.519420
61     2.479646
63     2.472937
56     2.468384
59     2.467426
         ...
115    0.000240
110    0.000240
109    0.000240
106    0.000240
118    0.000240
Name: EDAD, Length: 114, dtype: float64

EMBARAZO
 0    99.358584
1     0.641416
Name: EMBARAZO, dtype: float64

DIABETES
 0    67.527638
1    32.472362
Name: DIABETES, dtype: float64

EPOC
 0    96.529598
1     3.470402
Name: EPOC, dtype: float64

ASMA
 0    97.989975
1     2.010025
Name: ASMA, dtype: float64

INMUSUPR
 0    97.948045
1     2.051955
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    61.580945
1    38.419055
```

```
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.838585
1     4.161415
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    78.65861
1    21.34139
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.789605
1     5.210395
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.527998
1     7.472002
Name: TABAQUISMO, dtype: float64

UCI
 0    92.037052
1     7.962948
Name: UCI, dtype: float64

(417358, 15)
```

In [70]:
```
#CASO 7.1: necesidad de ventilador DESPUES de DIAGNOSTICO de neumonia
e ICU (con filtro)}
'''
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
UCI
1
100.0
Name: UCI, dtype: float64
NEUMONIA
1
100.0
Name: NEUMONIA, dtype: float64
'''
df = pd.read_csv("df_caso_7_1.zip")
print_values(df)
```

```
SEXO
 0    63.776258
1    36.223742
Name: SEXO, dtype: float64

INTUBADO
 1    56.741573
0    43.258427
Name: INTUBADO, dtype: float64

EDAD
 60     2.948566
61     2.679880
58     2.658943
55     2.578687
62     2.557750
         ...
5      0.013958
7      0.013958
99     0.010468
103    0.003489
116    0.003489
Name: EDAD, Length: 104, dtype: float64

EMBARAZO
 0    99.340498
1     0.659502
Name: EMBARAZO, dtype: float64

DIABETES
 0    65.629144
1    34.370856
Name: DIABETES, dtype: float64

EPOC
 0    96.636192
1     3.363808
Name: EPOC, dtype: float64

ASMA
 0    98.018005
1     1.981995
Name: ASMA, dtype: float64

INMUSUPR
 0    97.634168
1     2.365832
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    61.281318
1    38.718682
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.254379
1     4.745621
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    72.318375
1    27.681625
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    95.987159
1     4.012841
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.490753
1     7.509247
Name: TABAQUISMO, dtype: float64

(28658, 13)
```

In [71]:
```
#CASO 7.2: necesidad de ventilador DESPUES de DIAGNOSTICO de neumonia
e ICU (solo filtro UCI)
'''
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
UCI
1
100.0
Name: UCI, dtype: float64
'''
df = pd.read_csv("df_caso_7_2.zip")
print_values(df)
```

```
SEXO
 0    62.878378
1    37.121622
Name: SEXO, dtype: float64

INTUBADO
 1    52.064151
0    47.935849
Name: INTUBADO, dtype: float64

NEUMONIA
 1    86.230968
0    13.769032
Name: NEUMONIA, dtype: float64

EDAD
 60     2.867545
61     2.647891
58     2.641873
65     2.494433
55     2.491424
         ...
98     0.018054
99     0.015045
101    0.015045
103    0.006018
116    0.003009
Name: EDAD, Length: 104, dtype: float64

EMBARAZO
 0    99.103328
1     0.896672
Name: EMBARAZO, dtype: float64

DIABETES
 0    66.507191
1    33.492809
Name: DIABETES, dtype: float64

EPOC
 0    96.762352
1     3.237648
Name: EPOC, dtype: float64

ASMA
 0    97.996028
1     2.003972
Name: ASMA, dtype: float64

INMUSUPR
 0    97.634952
1     2.365048
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    62.117109
1    37.882891
```

```
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.284949
1     4.715051
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    73.289402
1    26.710598
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    96.046218
1     3.953782
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.751399
1     7.248601
Name: TABAQUISMO, dtype: float64

(33234, 14)
```

In [72]:
```
#CASO 7.3: necesidad de ventilador DESPUES de DIAGNOSTICO de neumonia
e ICU (solo filtro neumonia)
'''
TIPO_PACIENTE
1
100.0
Name: TIPO_PACIENTE, dtype: float64
NEUMONIA
1
100.0
Name: NEUMONIA, dtype: float64
'''
df = pd.read_csv("df_caso_7_3.zip")
print_values(df)
```

```
SEXO
 0    60.443549
1    39.556451
Name: SEXO, dtype: float64

INTUBADO
 0    83.196379
1    16.803621
Name: INTUBADO, dtype: float64

EDAD
 60     2.628060
63     2.591255
65     2.576679
61     2.561739
59     2.541697
         ...
116    0.000364
110    0.000364
108    0.000364
104    0.000364
118    0.000364
Name: EDAD, Length: 110, dtype: float64

EMBARAZO
 0    99.660014
1     0.339986
Name: EMBARAZO, dtype: float64

DIABETES
 0    66.272506
1    33.727494
Name: DIABETES, dtype: float64

EPOC
 0    96.454379
1     3.545621
Name: EPOC, dtype: float64

ASMA
 0    98.094183
1     1.905817
Name: ASMA, dtype: float64

INMUSUPR
 0    97.97466
1     2.02534
Name: INMUSUPR, dtype: float64

HIPERTENSION
 0    60.533191
1    39.466809
Name: HIPERTENSION, dtype: float64

CARDIOVASCULAR
 0    95.783881
1     4.216119
```

```
Name: CARDIOVASCULAR, dtype: float64

OBESIDAD
 0    77.413701
1    22.586299
Name: OBESIDAD, dtype: float64

RENAL_CRONICA
 0    94.921708
1     5.078292
Name: RENAL_CRONICA, dtype: float64

TABAQUISMO
 0    92.35669
1     7.64331
Name: TABAQUISMO, dtype: float64

UCI
 0    89.556998
1    10.443002
Name: UCI, dtype: float64

(274423, 14)
```

In [ ]: