TÍTULO

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```
import numpy as np
2
           scipy import stats
3
4
   # names of variables
5
   labels = ['age', 'leptin', 'bmi', 'adiponectin', 'glucose',
            'resistin', 'insulin', 'MCP1', 'HOMA']
6
7
   # loads data
8
   data = np.loadtxt (open (r'../../data.csv', 'rb'), delimiter = ',')
9
10
11
     rewrites data as all the rows of data w/out nan cells
   data = data [~np.isnan (data).any (axis=1)]
12
13
      separates parameters into matrix x
14
        = np.array ([list (data [x][:-1])
                                            for x in range (len (data))])
15
16
      and class (1, 2) into vector y
17
        = np.array ([int (data [x][ -1])
                                              for x in range (len (data))])
18
   у
19
20
   # removes outliers
21
   data_no = data [(np.abs (stats.zscore (data)) < 3).all (axis = 1)]</pre>
22
        \uparrow = No Outliers
23
   x_no = np.array ([list (data_no [x][:-1]) for x in range (len (data_no))])
24
   y_no = np.array ([int (data_no [x][ -1]) for x in range (len (data_no))])
```

Listing 1: Importaciones iniciales y preparacion de datos.

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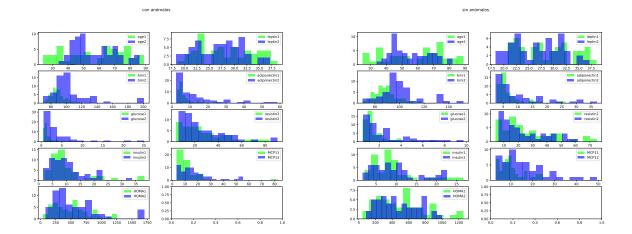


Fig. 1: Histogramas para datos con y sinanomalias.