

Overview

Dataset statistics	
Number of variables	18
Number of observations	31648
Missing cells	0
Missing cells (%)	0.0%
Total size in memory	4.6 MiB
Average record size in memory	152.0 B
Variable types	
Categorical	8
Numeric	10

Alerts

has a high cardinality: 31648 distinct values	High cardinality
Previous is highly skewed ($y_1 = 46.83998078$)	Skewed
has unique values	Unique
Credit has 31065 (98.2%) zeros	Zeros
Balance..euros. has 2465 (7.8%) zeros	Zeros
Housing.Loan has 14175 (44.8%) zeros	Zeros
Personal.Loan has 26559 (83.9%) zeros	Zeros
Previous has 25899 (81.8%) zeros	Zeros

Reproduction

Analysis started	2021-12-05 19:31:26.846128
Analysis finished	2021-12-05 19:31:27.502558
Duration	0.66 seconds
Software version	pandas-profiling v3.1.1 (https://github.com/pandas-profiling/pandas-profiling)
Download configuration	config.json (data:text/plain;charset=utf-8,%7B%22title%22%3A%20%22Pandas%20Profiling%20Report%22%2C%20%22dataset%22%3A%20%7B%22description%22%3A%20%22%22%

Variables

Categorical			HIGH
CARDINALITY			
UNIQUE			
Distinct		31648	
Distinct (%)		100.0%	
Missing		0	
Missing (%)		0.0%	
Memory size		494.5 KiB	

Unique

Unique	31648	?
Unique (%)	100.0%	

Sample

1st row	1
2nd row	2
3rd row	3
4th row	4
5th row	6

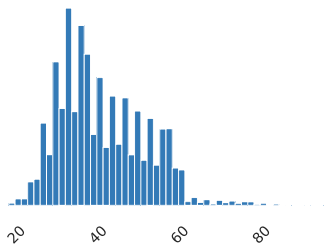
Common Values

Value	Count	Frequency (%)
35881	1	< 0.1%
20334	1	< 0.1%
41103	1	< 0.1%
7542	1	< 0.1%
34173	1	< 0.1%
44329	1	< 0.1%
10376	1	< 0.1%
10998	1	< 0.1%
36461	1	< 0.1%
2155	1	< 0.1%
Other values (31638)	31638	> 99.9%

Age

Real number ($\mathbb{R}_{\geq 0}$)

Distinct	76
Distinct (%)	0.2%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	40.92941102
Minimum	18
Maximum	95
Zeros	0
Zeros (%)	0.0%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



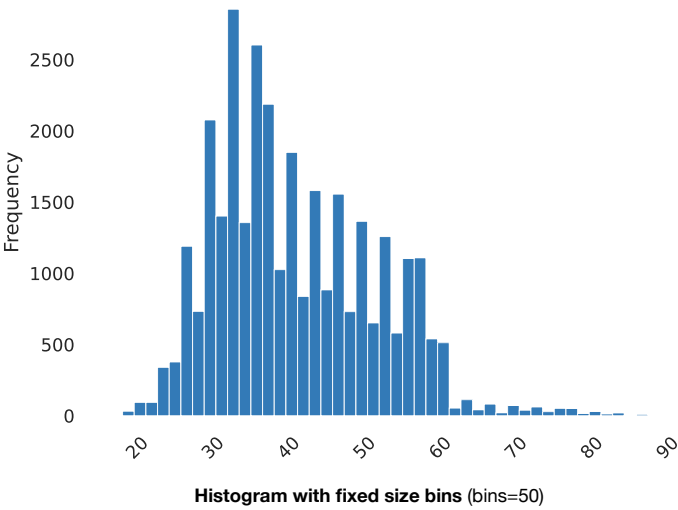
Quantile statistics

Minimum	18
5-th percentile	27
Q1	33
median	39
Q3	48
95-th percentile	59
Maximum	95
Range	77
Interquartile range (IQR)	15

Descriptive statistics

Standard deviation	10.6163581
Coefficient of variation (CV)	0.259382137
Kurtosis	0.3132474634
Mean	40.92941102
Median Absolute Deviation (MAD)	7
Skewness	0.6804954655
Sum	1295334

Variance	112.7070593
Monotonicity	Not monotonic



Value	Count	Frequency (%)
32	1481	4.7%
31	1402	4.4%
33	1373	4.3%
34	1356	4.3%
35	1331	4.2%
36	1272	4.0%
30	1261	4.0%
37	1150	3.6%
38	1037	3.3%
39	1026	3.2%
Other values (66)	18959	59.9%

Value	Count	Frequency (%)
18	9	< 0.1%
19	23	0.1%
20	39	0.1%
21	55	0.2%
22	94	0.3%

Value	Count	Frequency (%)
95	2	< 0.1%
94	1	< 0.1%
93	2	< 0.1%
92	2	< 0.1%
89	2	< 0.1%

Job

Categorical

Distinct	12
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	494.5 KiB

Unique

Unique	0	?
Unique (%)	0.0%	

Sample

1st row	management
2nd row	technician
3rd row	entrepreneur
4th row	blue-collar
5th row	management

Common Values

Value	Count	Frequency (%)
blue-collar	6763	21.4%
management	6594	20.8%
technician	5278	16.7%
admin.	3592	11.3%
services	2951	9.3%
retired	1604	5.1%
self-employed	1125	3.6%
entrepreneur	1067	3.4%
unemployed	932	2.9%
housemaid	868	2.7%
Other values (2)	874	2.8%

Marital.Status

Categorical

Distinct	3
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	494.5 KiB

Unique

Unique	0	?
Unique (%)	0.0%	

Sample

1st row	married
2nd row	single
3rd row	married
4th row	married
5th row	married

Common Values

Value	Count	Frequency (%)
married	19027	60.1%
single	9002	28.4%
divorced	3619	11.4%

Education

Categorical

Distinct	4
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	494.5 KiB

Unique

Unique	0	?
Unique (%)	0.0%	

Sample

1st row	tertiary
2nd row	secondary
3rd row	secondary
4th row	unknown
5th row	tertiary

Common Values

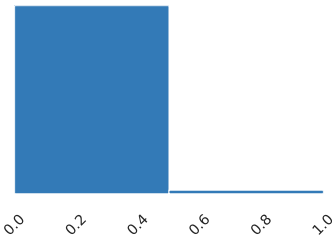
Value	Count	Frequency (%)
secondary	16118	50.9%
tertiary	9386	29.7%
primary	4838	15.3%
unknown	1306	4.1%

Credit

Real number ($\mathbb{R}_{\geq 0}$)

ZEROS

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	0.01842138524
Minimum	0
Maximum	1
Zeros	31065
Zeros (%)	98.2%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



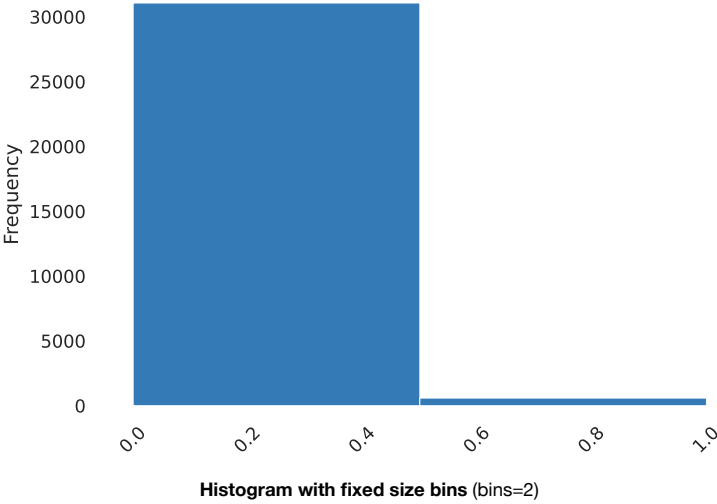
Quantile statistics

Minimum	0
5-th percentile	0
Q1	0
median	0
Q3	0
95-th percentile	0
Maximum	1
Range	1
Interquartile range (IQR)	0

Descriptive statistics

Standard deviation	0.1344715924
Coefficient of variation (CV)	7.299754643
Kurtosis	49.31148109
Mean	0.01842138524
Median Absolute Deviation (MAD)	0
Skewness	7.162985749
Sum	583

Variance	0.01808260917
Monotonicity	Not monotonic



Value	Count	Frequency (%)
0	31065	98.2%
1	583	1.8%

Value	Count	Frequency (%)
0	31065	98.2%
1	583	1.8%

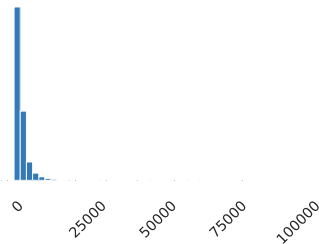
Value	Count	Frequency (%)
1	583	1.8%
0	31065	98.2%

Balance..euros.

Real number (\mathbb{R})

ZEROS

Distinct	6297
Distinct (%)	19.9%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	1377.338947
Minimum	-8019
Maximum	102127
Zeros	2465
Zeros (%)	7.8%
Negative	2620
Negative (%)	8.3%
Memory size	494.5 KiB



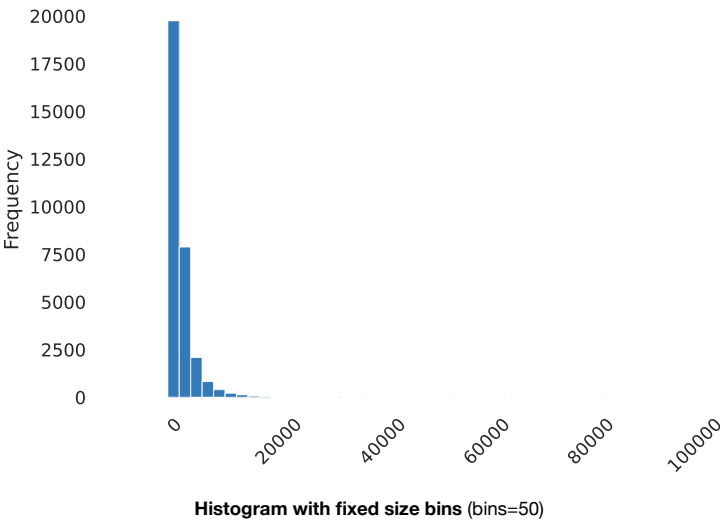
Quantile statistics

Minimum	-8019
5-th percentile	-169
Q1	72
median	452
Q3	1438
95-th percentile	5787.65
Maximum	102127
Range	110146
Interquartile range (IQR)	1366

Descriptive statistics

Standard deviation	3089.350716
Coefficient of variation (CV)	2.242985085
Kurtosis	143.0386954
Mean	1377.338947
Median Absolute Deviation (MAD)	452
Skewness	8.370358843
Sum	43590023

Variance	9544087.847
Monotonicity	Not monotonic



Value	Count	Frequency (%)
0	2465	7.8%
1	130	0.4%
2	109	0.3%
4	89	0.3%
3	87	0.3%
5	86	0.3%
6	56	0.2%
8	56	0.2%
23	51	0.2%
49	50	0.2%
Other values (6287)	28469	90.0%

Value	Count	Frequency (%)
-8019	1	< 0.1%
-6847	1	< 0.1%
-4057	1	< 0.1%
-3372	1	< 0.1%
-2827	1	< 0.1%

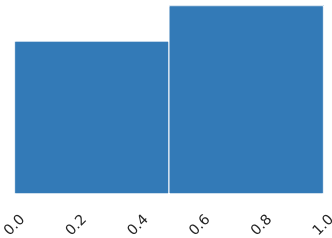
Value	Count	Frequency (%)
102127	1	< 0.1%
98417	1	< 0.1%
81204	1	< 0.1%
66653	1	< 0.1%
64343	1	< 0.1%

Housing.Loan

Real number ($\mathbb{R}_{\geq 0}$)

ZEROS

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	0.5521043984
Minimum	0
Maximum	1
Zeros	14175
Zeros (%)	44.8%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



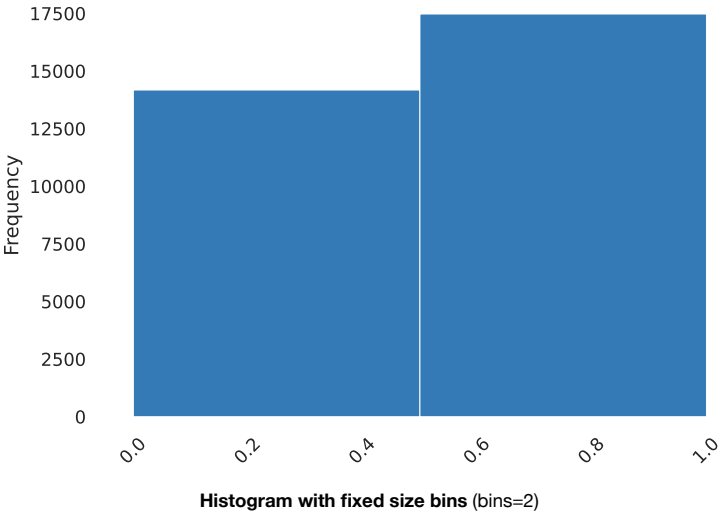
Quantile statistics

Minimum	0
5-th percentile	0
Q1	0
median	1
Q3	1
95-th percentile	1
Maximum	1
Range	1
Interquartile range (IQR)	1

Descriptive statistics

Standard deviation	0.4972855774
Coefficient of variation (CV)	0.9007093204
Kurtosis	-1.956204679
Mean	0.5521043984
Median Absolute Deviation (MAD)	0
Skewness	-0.2095684802
Sum	17473

Variance	0.2472929455
Monotonicity	Not monotonic



Value	Count	Frequency (%)
1	17473	55.2%
0	14175	44.8%

Value	Count	Frequency (%)
0	14175	44.8%
1	17473	55.2%

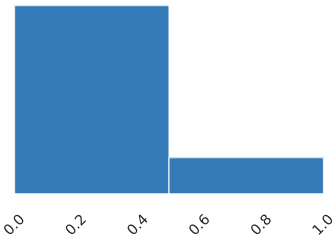
Value	Count	Frequency (%)
1	17473	55.2%
0	14175	44.8%

Personal.Loan

Real number ($\mathbb{R}_{\geq 0}$)

ZEROS

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	0.1608000506
Minimum	0
Maximum	1
Zeros	26559
Zeros (%)	83.9%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



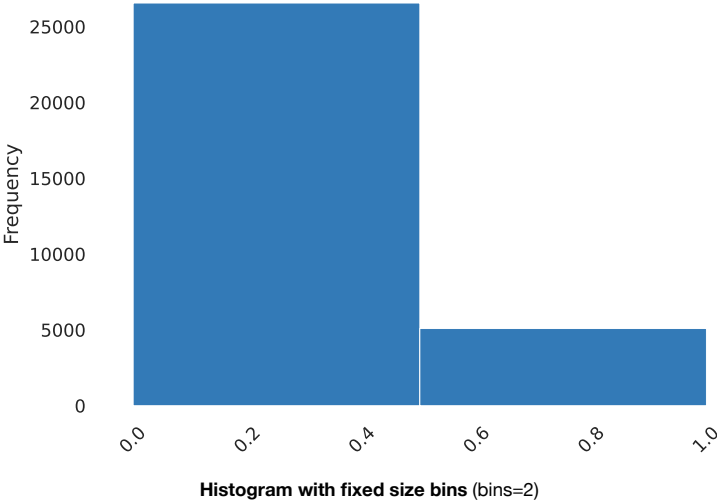
Quantile statistics

Minimum	0
5-th percentile	0
Q1	0
median	0
Q3	0
95-th percentile	1
Maximum	1
Range	1
Interquartile range (IQR)	0

Descriptive statistics

Standard deviation	0.3673522265
Coefficient of variation (CV)	2.284528054
Kurtosis	1.410927126
Mean	0.1608000506
Median Absolute Deviation (MAD)	0
Skewness	1.846845409
Sum	5089

Variance	0.1349476583
Monotonicity	Not monotonic



Value	Count	Frequency (%)
0	26559	83.9%
1	5089	16.1%

Value	Count	Frequency (%)
0	26559	83.9%
1	5089	16.1%

Value	Count	Frequency (%)
1	5089	16.1%
0	26559	83.9%

Contact

Categorical

Distinct	3
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	494.5 KiB

Unique

Unique	0	?
Unique (%)	0.0%	

Sample

1st row	unknown
2nd row	unknown
3rd row	unknown
4th row	unknown
5th row	unknown

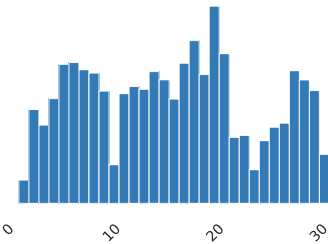
Common Values

Value	Count	Frequency (%)
cellular	20497	64.8%
unknown	9130	28.8%
telephone	2021	6.4%

Last.Contact.Day

Real number ($\mathbb{R}_{\geq 0}$)

Distinct	31
Distinct (%)	0.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	15.80627528
Minimum	1
Maximum	31
Zeros	0
Zeros (%)	0.0%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



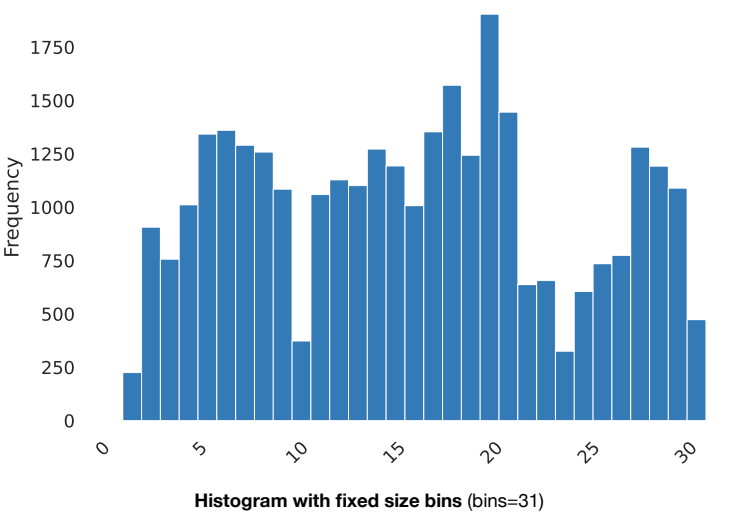
Quantile statistics

Minimum	1
5-th percentile	3
Q1	8
median	16
Q3	21
95-th percentile	29
Maximum	31
Range	30
Interquartile range (IQR)	13

Descriptive statistics

Standard deviation	8.326738517
Coefficient of variation (CV)	0.5267995382
Kurtosis	-1.061699367
Mean	15.80627528
Median Absolute Deviation (MAD)	7
Skewness	0.09280511524
Sum	500237

Variance	69.33457433
Monotonicity	Not monotonic



Value	Count	Frequency (%)
20	1904	6.0%
18	1571	5.0%
21	1445	4.6%
6	1360	4.3%
17	1353	4.3%
5	1342	4.2%
7	1290	4.1%
28	1281	4.0%
14	1272	4.0%
8	1258	4.0%
Other values (21)	17572	55.5%

Value	Count	Frequency (%)
1	225	0.7%
2	906	2.9%
3	756	2.4%
4	1011	3.2%
5	1342	4.2%

Value	Count	Frequency (%)
31	473	1.5%
30	1089	3.4%
29	1192	3.8%
28	1281	4.0%
27	774	2.4%

Last.Contact.Month

Categorical

Distinct	12
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	494.5 KiB

Unique

Unique	0	?
Unique (%)	0.0%	

Sample

1st row	may
2nd row	may
3rd row	may
4th row	may
5th row	may

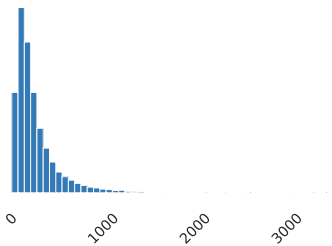
Common Values

Value	Count	Frequency (%)
may	9582	30.3%
jul	4838	15.3%
aug	4431	14.0%
jun	3747	11.8%
nov	2787	8.8%
apr	2040	6.4%
feb	1863	5.9%
jan	959	3.0%
oct	519	1.6%
sep	397	1.3%
Other values (2)	485	1.5%

Last.Contact.Duration

Real number ($\mathbb{R}_{\geq 0}$)

Distinct	1454
Distinct (%)	4.6%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	256.7519906
Minimum	0
Maximum	3422
Zeros	3
Zeros (%)	< 0.1%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



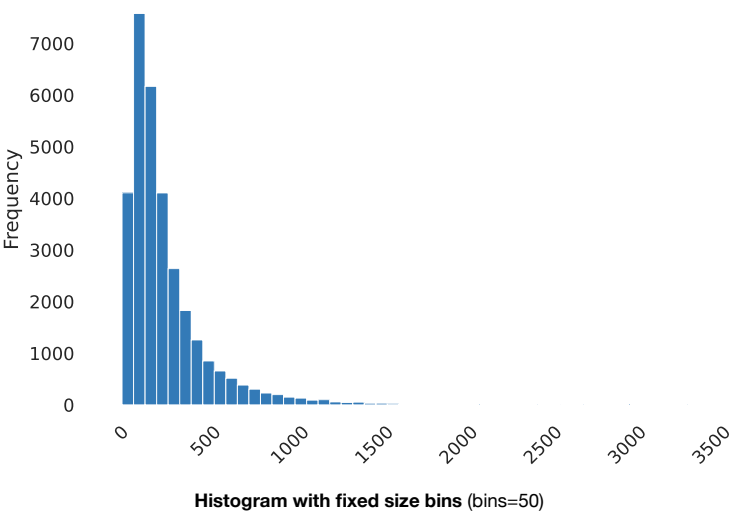
Quantile statistics

Minimum	0
5-th percentile	35
Q1	103
median	179
Q3	317
95-th percentile	746
Maximum	3422
Range	3422
Interquartile range (IQR)	214

Descriptive statistics

Standard deviation	255.1034239
Coefficient of variation (CV)	0.9935791472
Kurtosis	14.91953071
Mean	256.7519906
Median Absolute Deviation (MAD)	93
Skewness	3.000789916
Sum	8125687

Variance	65077.75689
Monotonicity	Not monotonic



Value	Count	Frequency (%)
124	147	0.5%
90	136	0.4%
136	133	0.4%
88	128	0.4%
104	127	0.4%
93	127	0.4%
112	125	0.4%
122	124	0.4%
97	124	0.4%
113	124	0.4%
Other values (1444)	30353	95.9%

Value	Count	Frequency (%)
0	3	< 0.1%
2	3	< 0.1%
3	4	< 0.1%
4	10	< 0.1%
5	29	0.1%

Value	Count	Frequency (%)
3422	1	< 0.1%
3322	1	< 0.1%
3284	1	< 0.1%
3253	1	< 0.1%
3183	1	< 0.1%

Campaign

Real number ($\mathbb{R}_{\geq 0}$)

Distinct	46
Distinct (%)	0.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	2.762007078
Minimum	1
Maximum	63
Zeros	0
Zeros (%)	0.0%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



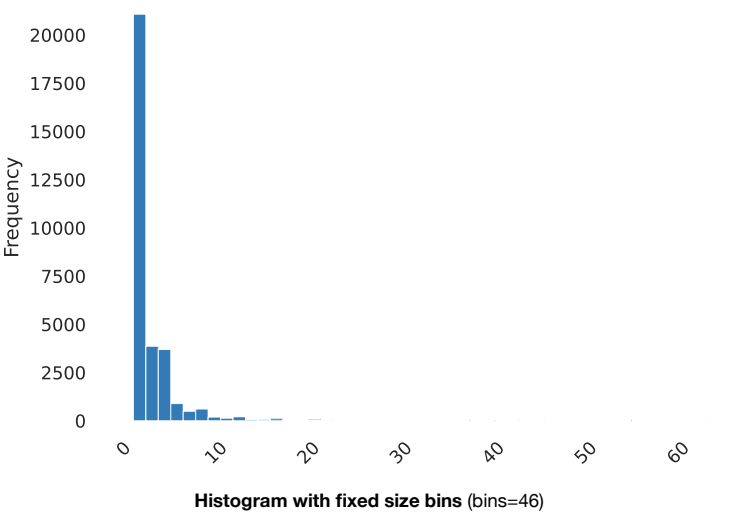
Quantile statistics

Minimum	1
5-th percentile	1
Q1	1
median	2
Q3	3
95-th percentile	8
Maximum	63
Range	62
Interquartile range (IQR)	2

Descriptive statistics

Standard deviation	3.116285364
Coefficient of variation (CV)	1.128268421
Kurtosis	40.35341291
Mean	2.762007078
Median Absolute Deviation (MAD)	1
Skewness	4.982358319
Sum	87412

Variance	9.711234471
Monotonicity	Not monotonic



Value	Count	Frequency (%)
1	12257	38.7%
2	8820	27.9%
3	3862	12.2%
4	2457	7.8%
5	1236	3.9%
6	892	2.8%
7	490	1.5%
8	390	1.2%
9	219	0.7%
10	191	0.6%
Other values (36)	834	2.6%

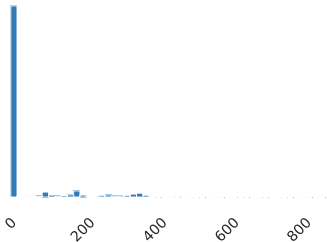
Value	Count	Frequency (%)
1	12257	38.7%
2	8820	27.9%
3	3862	12.2%
4	2457	7.8%
5	1236	3.9%

Value	Count	Frequency (%)
63	1	< 0.1%
55	1	< 0.1%
51	1	< 0.1%
50	1	< 0.1%
46	1	< 0.1%

Pdays

Real number (\mathbb{R})

Distinct	515
Distinct (%)	1.6%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	39.93525657
Minimum	-1
Maximum	871
Zeros	0
Zeros (%)	0.0%
Negative	25899
Negative (%)	81.8%
Memory size	494.5 KiB



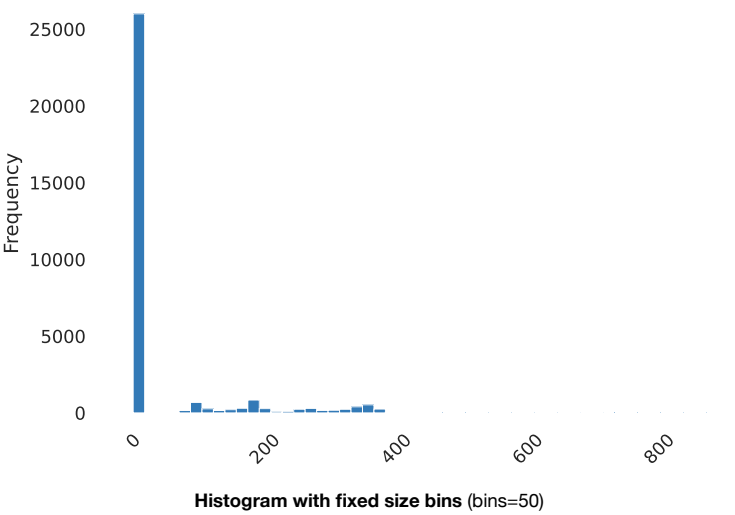
Quantile statistics

Minimum	-1
5-th percentile	-1
Q1	-1
median	-1
Q3	-1
95-th percentile	316
Maximum	871
Range	872
Interquartile range (IQR)	0

Descriptive statistics

Standard deviation	99.75493312
Coefficient of variation (CV)	2.49791642
Kurtosis	7.037597484
Mean	39.93525657
Median Absolute Deviation (MAD)	0
Skewness	2.628303875
Sum	1263871

Variance	9951.046682
Monotonicity	Not monotonic



Value	Count	Frequency (%)
-1	25899	81.8%
182	119	0.4%
92	102	0.3%
183	90	0.3%
181	88	0.3%
91	87	0.3%
370	68	0.2%
184	65	0.2%
364	53	0.2%
175	53	0.2%
Other values (505)	5024	15.9%

Value	Count	Frequency (%)
-1	25899	81.8%
1	8	< 0.1%
2	26	0.1%
3	1	< 0.1%
4	2	< 0.1%

Value	Count	Frequency (%)
871	1	< 0.1%
854	1	< 0.1%
850	1	< 0.1%
842	1	< 0.1%
831	1	< 0.1%

Previous

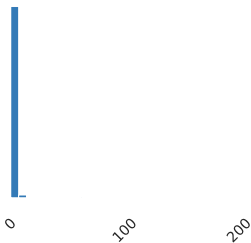
Real number ($\mathbb{R}_{\geq 0}$)

SKEWED

ZEROS

Distinct	40
Distinct (%)	0.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	0.5861349848

Minimum	0
Maximum	275
Zeros	25899
Zeros (%)	81.8%
Negative	0
Negative (%)	0.0%
Memory size	494.5 KiB



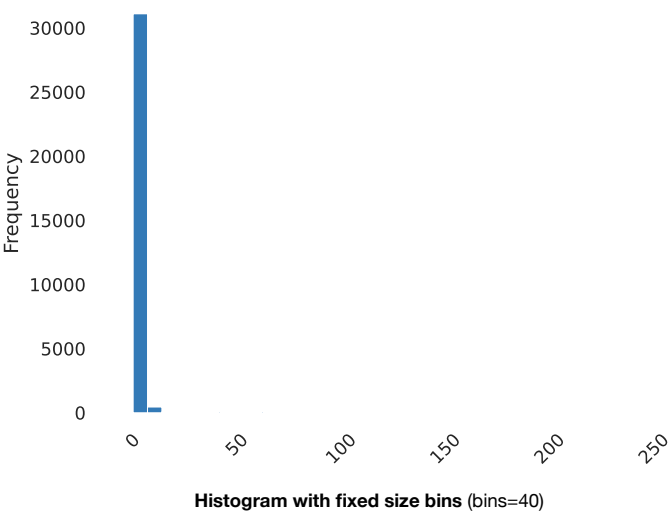
Quantile statistics

Minimum	0
5-th percentile	0
Q1	0
median	0
Q3	0
95-th percentile	3
Maximum	275
Range	275
Interquartile range (IQR)	0

Descriptive statistics

Standard deviation	2.476426578
Coefficient of variation (CV)	4.225010693
Kurtosis	4806.780041
Mean	0.5861349848
Median Absolute Deviation (MAD)	0
Skewness	46.83998078

Sum	18550
Variance	6.132688597
Monotonicity	Not monotonic



Value	Count	Frequency (%)
0	25899	81.8%
1	1906	6.0%
2	1458	4.6%
3	805	2.5%
4	498	1.6%
5	336	1.1%
6	196	0.6%
7	140	0.4%
8	94	0.3%
9	56	0.2%
Other values (30)	260	0.8%

Value	Count	Frequency (%)
0	25899	81.8%
1	1906	6.0%
2	1458	4.6%
3	805	2.5%
4	498	1.6%

Value	Count	Frequency (%)
275	1	< 0.1%
58	1	< 0.1%
55	1	< 0.1%
41	1	< 0.1%
40	1	< 0.1%

Poutcome

Categorical

Distinct	4
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	494.5 KiB

Unique

Unique	0	?
Unique (%)	0.0%	

Sample

1st row	unknown
2nd row	unknown
3rd row	unknown
4th row	unknown
5th row	unknown

Common Values

Value	Count	Frequency (%)
unknown	25901	81.8%
failure	3435	10.9%
other	1251	4.0%
success	1061	3.4%

Subscription

Categorical

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	494.5 KiB

Unique

Unique	0	?
Unique (%)	0.0%	

Sample

1st row	0
2nd row	0
3rd row	0
4th row	0
5th row	0

Common Values

Value	Count	Frequency (%)
0	27951	88.3%
1	3697	11.7%

Report generated with pandas-profiling (<https://github.com/pandas-profiling/pandas-profiling>).