

# Overview

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## Dataset statistics

<b>Number of variables</b>	22
<b>Number of observations</b>	2000
<b>Missing cells</b>	0
<b>Missing cells (%)</b>	0.0%
<b>Duplicate rows</b>	0
<b>Duplicate rows (%)</b>	0.0%
<b>Total size in memory</b>	747.1 KiB
<b>Average record size in memory</b>	382.5 B

## Variable types

<b>Numeric</b>	15
<b>Categorical</b>	7

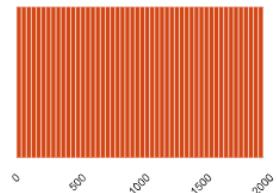
# Variables

## id

Real number ( $\mathbb{R}_{\geq 0}$ )**UNIFORM****UNIQUE***ID*

<b>Distinct</b>	2000
<b>Distinct (%)</b>	100.0%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Infinite</b>	0
<b>Infinite (%)</b>	0.0%

<b>Mean</b>	999.5
<b>Minimum</b>	0
<b>Maximum</b>	1999
<b>Zeros</b>	1
<b>Zeros (%)</b>	< 0.1%
<b>Memory size</b>	15.8 KiB

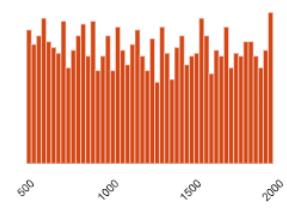

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## battery\_power

Real number ( $\mathbb{R}_{\geq 0}$ )
*Total energy a battery can store in one time measured in mAh*

<b>Distinct</b>	1094
<b>Distinct (%)</b>	54.7%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Infinite</b>	0
<b>Infinite (%)</b>	0.0%

<b>Mean</b>	1238.5185
<b>Minimum</b>	501
<b>Maximum</b>	1998
<b>Zeros</b>	0
<b>Zeros (%)</b>	0.0%
<b>Memory size</b>	15.8 KiB


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## Quantile statistics

## Descriptive statistics

<b>Minimum</b>	501
<b>5-th percentile</b>	570.95
<b>Q1</b>	851.75
<b>median</b>	1226
<b>Q3</b>	1615.25
<b>95-th percentile</b>	1930.15
<b>Maximum</b>	1998
<b>Range</b>	1497
<b>Interquartile range (IQR)</b>	763.5

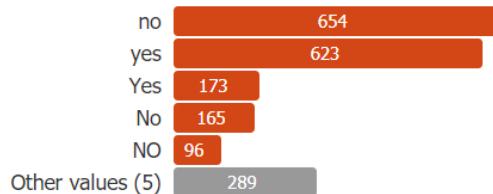
<b>Standard deviation</b>	439.4182061
<b>Coefficient of variation (CV)</b>	0.3547934133
<b>Kurtosis</b>	-1.224143883
<b>Mean</b>	1238.5185
<b>Median Absolute Deviation (MAD)</b>	382
<b>Skewness</b>	0.03189847179
<b>Sum</b>	2477037
<b>Variance</b>	193088.3598
<b>Monotocity</b>	Not monotonic

## blue

Categorical

Has bluetooth or not

<b>Distinct</b>	10
<b>Distinct (%)</b>	0.5%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Memory size</b>	116.4 KiB



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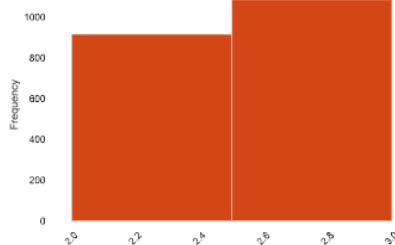
Overview

Categories

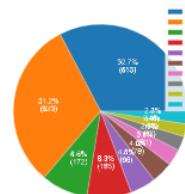
Words

Characters

Value	Count	Frequency (%)
no	654	32.7%
yes	623	31.1%
Yes	173	8.6%
No	165	8.2%
NO	96	4.8%
YES	79	4.0%
has	62	3.1%
Has	53	2.6%
Not	48	2.4%
not	47	2.4%



Histogram of lengths of the category



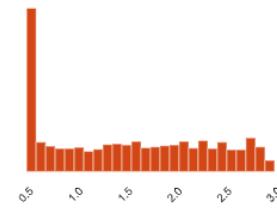
## clock\_speed

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

speed at which microprocessor executes instructions

<b>Distinct</b>	26
<b>Distinct (%)</b>	1.3%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Infinite</b>	0
<b>Infinite (%)</b>	0.0%

<b>Mean</b>	1.52225
<b>Minimum</b>	0.5
<b>Maximum</b>	3
<b>Zeros</b>	0
<b>Zeros (%)</b>	0.0%
<b>Memory size</b>	15.8 KiB



Toggle details

Statistics

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Common values

Extreme values

## Quantile statistics

Minimum	0.5
5-th percentile	0.5
Q1	0.7
median	1.5
Q3	2.2
95-th percentile	2.8
Maximum	3
Range	2.5
Interquartile range (IQR)	1.5

## Descriptive statistics

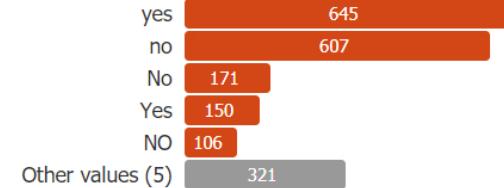
Standard deviation	0.8160042089
Coefficient of variation (CV)	0.5360513772
Kurtosis	-1.323417222
Mean	1.52225
Median Absolute Deviation (MAD)	0.8
Skewness	0.1780841203
Sum	3044.5
Variance	0.6658628689
Monotocity	Not monotonic

## dual\_sim

Categorical

Has dual sim support or not

Distinct	10
Distinct (%)	0.5%
Missing	0
Missing (%)	0.0%
Memory size	116.4 KiB



Toggle details

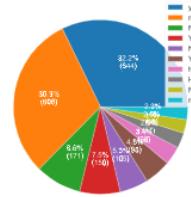
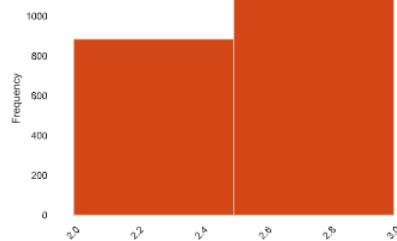
Overview

Categories

Words

Characters

Value	Count	Frequency (%)
yes	645	32.2%
no	607	30.3%
No	171	8.6%
Yes	150	7.5%
NO	106	5.3%
YES	99	5.0%
has	68	3.4%
Has	57	2.9%
Not	51	2.5%
not	46	2.3%



## fc

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

ZEROS

Distinct	20
Distinct (%)	1.0%
Missing	0

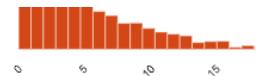
Mean	4.3095
Minimum	0
Maximum	19



Front Camera mega pixels

Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%

Zeros	474
Zeros (%)	23.7%
Memory size	15.8 KiB

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Statistics

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Extreme values

## Quantile statistics

Minimum	0
5-th percentile	0
Q1	1
median	3
Q3	7
95-th percentile	13
Maximum	19
Range	19
Interquartile range (IQR)	6

## Descriptive statistics

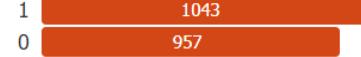
Standard deviation	4.341443748
Coefficient of variation (CV)	1.007412402
Kurtosis	0.2770763246
Mean	4.3095
Median Absolute Deviation (MAD)	3
Skewness	1.019811411
Sum	8619
Variance	18.84813382
Monotocity	Not monotonic

four\_g

Categorical

Has 4G or not. 1 = yes, 0 = no

Distinct	2
Distinct (%)	0.1%
Missing	0
Missing (%)	0.0%
Memory size	113.4 KiB

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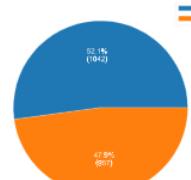
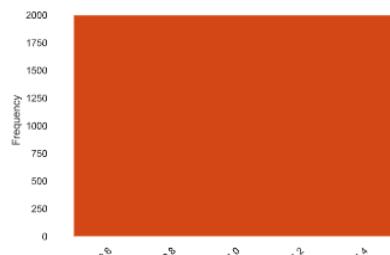
Overview

Categories

Words

Characters

Value	Count	Frequency (%)
1	1043	52.1%
0	957	47.9%



Histogram of lengths of the category

int\_memory

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

internal Memory in Gigabytes

Distinct	63
Distinct (%)	3.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%

Mean	32.0465
Minimum	2
Maximum	64
Zeros	0
Zeros (%)	0.0%
Memory size	15.8 KiB



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## Quantile statistics

Minimum	2
5-th percentile	5
Q1	16
median	32
Q3	48
95-th percentile	61
Maximum	64
Range	62
Interquartile range (IQR)	32

## Descriptive statistics

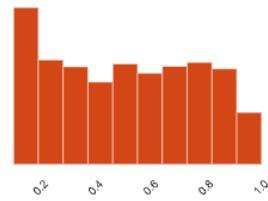
Standard deviation	18.14571496
Coefficient of variation (CV)	0.5662307882
Kurtosis	-1.21607403
Mean	32.0465
Median Absolute Deviation (MAD)	16
Skewness	0.05788932785
Sum	64093
Variance	329.2669712
Monotocity	Not monotonic

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

Mobile Depth in cm

Distinct	10
Distinct (%)	0.5%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%

Mean	0.50175
Minimum	0.1
Maximum	1
Zeros	0
Zeros (%)	0.0%
Memory size	15.8 KiB

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## Quantile statistics

Minimum	0.1
5-th percentile	0.1
Q1	0.2
median	0.5
Q3	0.8
95-th percentile	1
Maximum	1
Range	0.9
Interquartile range (IQR)	0.6

## Descriptive statistics

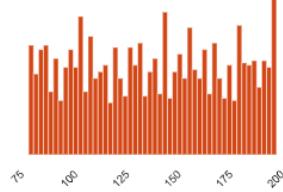
Standard deviation	0.2884155496
Coefficient of variation (CV)	0.5748192319
Kurtosis	-1.274348884
Mean	0.50175
Median Absolute Deviation (MAD)	0.3
Skewness	0.08908200979
Sum	1003.5
Variance	0.08318352926
Monotocity	Not monotonic

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

Weight of mobile phone

Distinct	121
Distinct (%)	6.0%
Missing	0
Missing (%)	0.0%
Infinite	0

Mean	140.249
Minimum	80
Maximum	200
Zeros	0
Zeros (%)	0.0%



Infinite (%)

0.0%

Memory size

15.8 KiB

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## Quantile statistics

Minimum	80
5-th percentile	86
Q1	109
median	141
Q3	170
95-th percentile	196
Maximum	200
Range	120
Interquartile range (IQR)	61

## Descriptive statistics

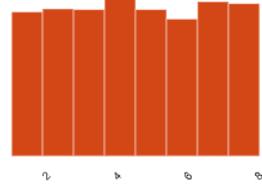
Standard deviation	35.3996549
Coefficient of variation (CV)	0.2524057562
Kurtosis	-1.210376474
Mean	140.249
Median Absolute Deviation (MAD)	31
Skewness	0.006558157429
Sum	280498
Variance	1253.135567
Monotocity	Not monotonic

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

Number of cores of processor

Distinct	8
Distinct (%)	0.4%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%

Mean	4.5205
Minimum	1
Maximum	8
Zeros	0
Zeros (%)	0.0%
Memory size	15.8 KiB



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## Quantile statistics

Minimum	1
5-th percentile	1
Q1	3
median	4
Q3	7
95-th percentile	8
Maximum	8
Range	7
Interquartile range (IQR)	4

## Descriptive statistics

Standard deviation	2.287836718
Coefficient of variation (CV)	0.5061025811
Kurtosis	-1.229749767
Mean	4.5205
Median Absolute Deviation (MAD)	2
Skewness	0.003627508314
Sum	9041
Variance	5.234196848
Monotocity	Not monotonic

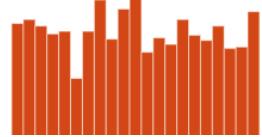
pcReal number ( $\mathbb{R}_{\geq 0}$ )

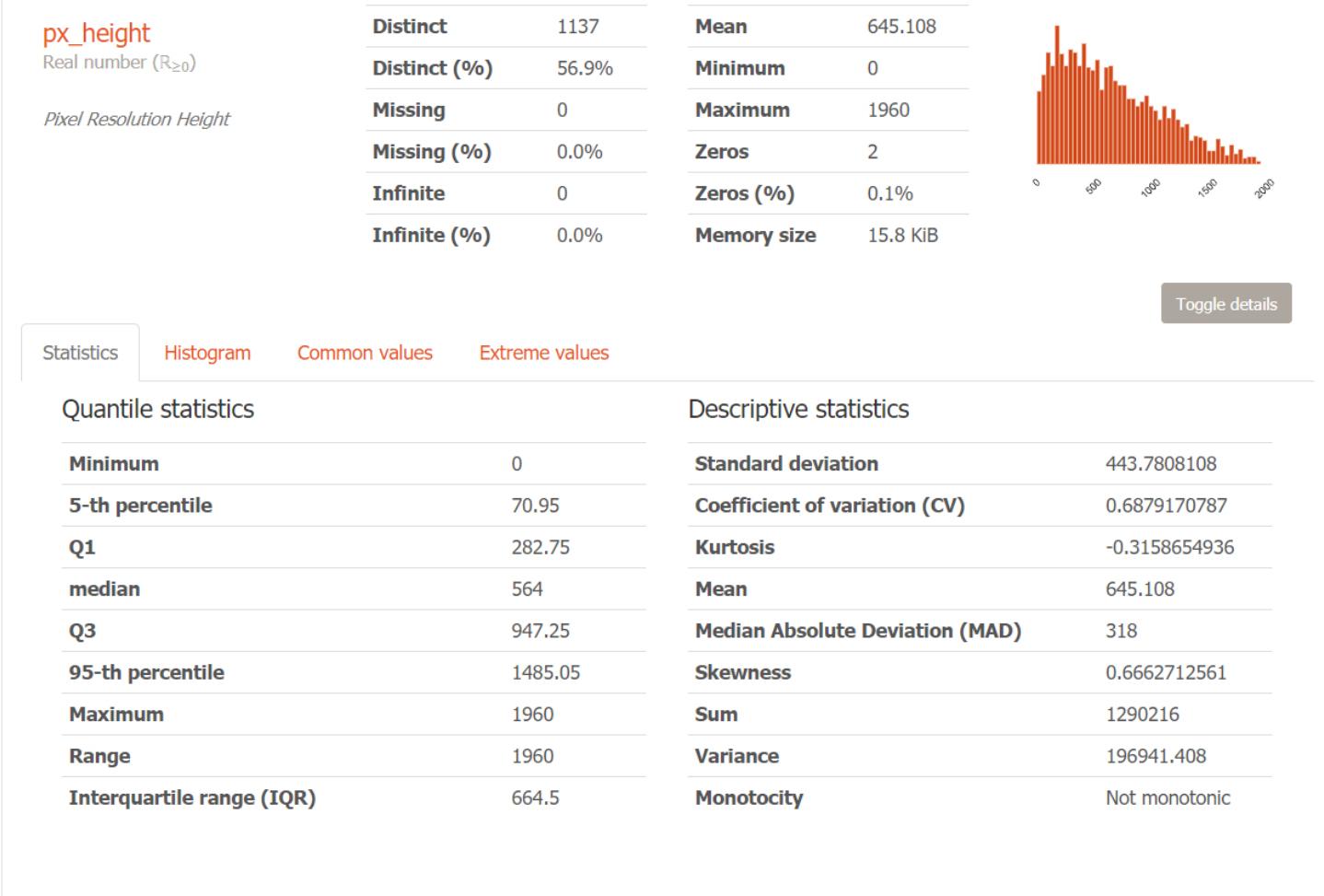
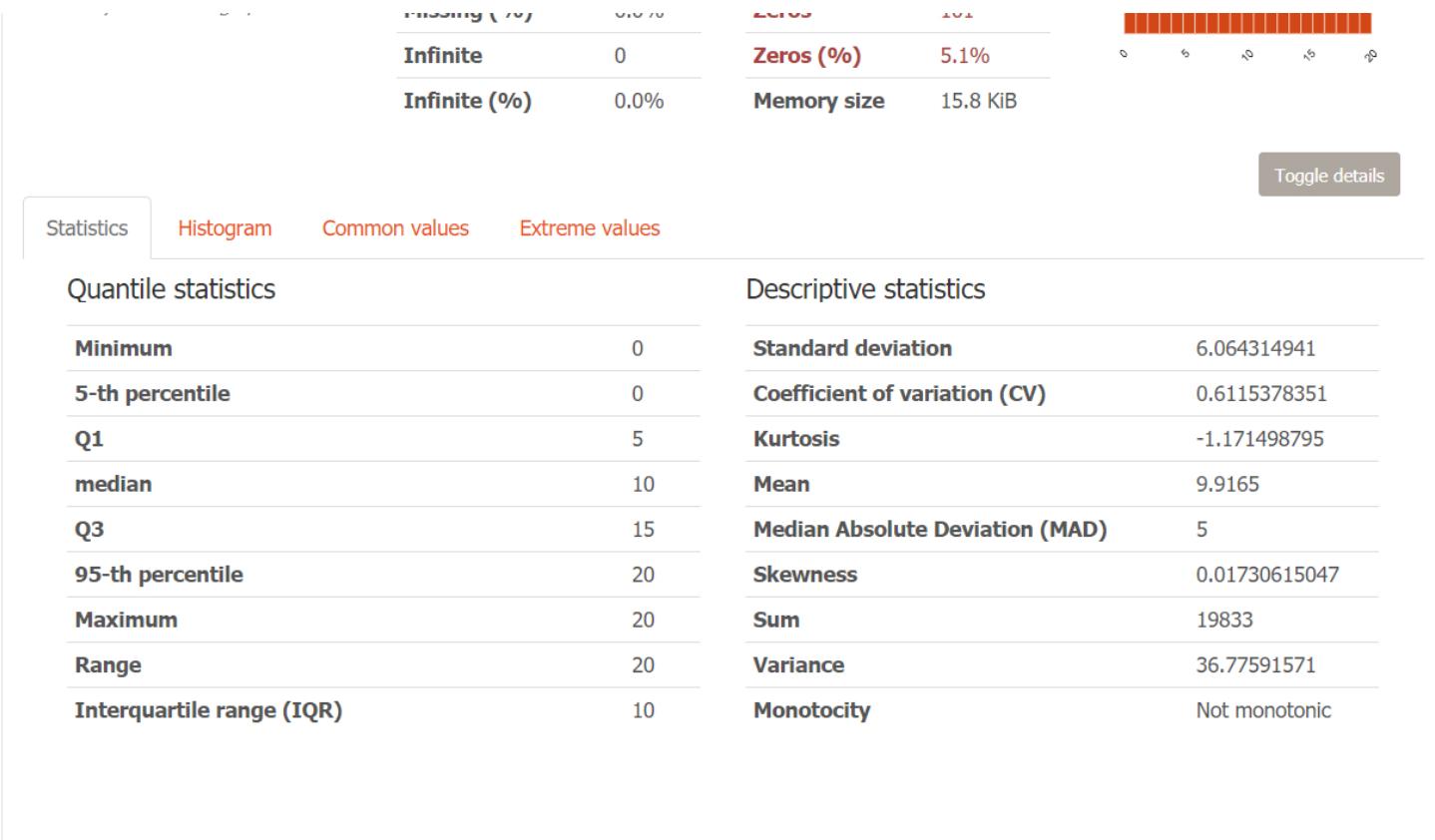
ZEROS

Primary Camera mega pixels

Distinct	21
Distinct (%)	1.1%
Missing	0
Missing (%)	0.0%

Mean	9.9165
Minimum	0
Maximum	20
Zeros	101

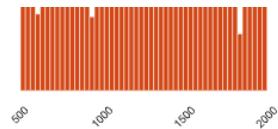




Pixel Resolution Width

Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%

Maximum	1998
Zeros	0
Zeros (%)	0.0%
Memory size	15.8 KiB

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## Quantile statistics

Minimum	500
5-th percentile	579.85
Q1	874.75
median	1247
Q3	1633
95-th percentile	1929.05
Maximum	1998
Range	1498
Interquartile range (IQR)	758.25

## Descriptive statistics

Standard deviation	432.1994469
Coefficient of variation (CV)	0.3453408663
Kurtosis	-1.186005229
Mean	1251.5155
Median Absolute Deviation (MAD)	376
Skewness	0.01478747377
Sum	2503031
Variance	186796.3619
Monotocity	Not monotonic

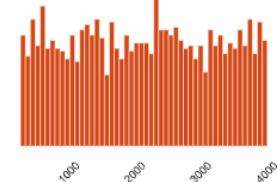
ram

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

Random Access Memory in Mega Bytes

Distinct	1562
Distinct (%)	78.1%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%

Mean	2124.213
Minimum	256
Maximum	3998
Zeros	0
Zeros (%)	0.0%
Memory size	15.8 KiB

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## Quantile statistics

Minimum	256
5-th percentile	445
Q1	1207.5
median	2146.5
Q3	3064.5
95-th percentile	3826.35
Maximum	3998
Range	3742
Interquartile range (IQR)	1857

## Descriptive statistics

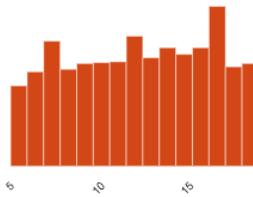
Standard deviation	1084.732044
Coefficient of variation (CV)	0.5106512594
Kurtosis	-1.19191307
Mean	2124.213
Median Absolute Deviation (MAD)	932.5
Skewness	0.006628035399
Sum	4248426
Variance	1176643.606
Monotocity	Not monotonic

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

Screen Height of mobile in cm

<b>Distinct</b>	15
<b>Distinct (%)</b>	0.8%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Infinite</b>	0
<b>Infinite (%)</b>	0.0%

<b>Mean</b>	12.3065
<b>Minimum</b>	5
<b>Maximum</b>	19
<b>Zeros</b>	0
<b>Zeros (%)</b>	0.0%
<b>Memory size</b>	15.8 KiB

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<b>Minimum</b>	5
<b>5-th percentile</b>	6
<b>Q1</b>	9
<b>median</b>	12
<b>Q3</b>	16
<b>95-th percentile</b>	19
<b>Maximum</b>	19
<b>Range</b>	14
<b>Interquartile range (IQR)</b>	7

**Descriptive statistics**

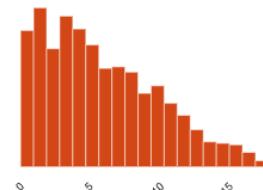
<b>Standard deviation</b>	4.213245004
<b>Coefficient of variation (CV)</b>	0.3423593227
<b>Kurtosis</b>	-1.190791247
<b>Mean</b>	12.3065
<b>Median Absolute Deviation (MAD)</b>	4
<b>Skewness</b>	-0.09888424098
<b>Sum</b>	24613
<b>Variance</b>	17.75143347
<b>Monotocity</b>	Not monotonic

**SC\_W**Real number ( $\mathbb{R}_{\geq 0}$ )**ZEROS**

Screen Width of mobile in cm

<b>Distinct</b>	19
<b>Distinct (%)</b>	0.9%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Infinite</b>	0
<b>Infinite (%)</b>	0.0%

<b>Mean</b>	5.767
<b>Minimum</b>	0
<b>Maximum</b>	18
<b>Zeros</b>	180
<b>Zeros (%)</b>	9.0%
<b>Memory size</b>	15.8 KiB

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<b>Minimum</b>	0
<b>5-th percentile</b>	0
<b>Q1</b>	2
<b>median</b>	5
<b>Q3</b>	9
<b>95-th percentile</b>	14
<b>Maximum</b>	18
<b>Range</b>	18
<b>Interquartile range (IQR)</b>	7

**Descriptive statistics**

<b>Standard deviation</b>	4.356397606
<b>Coefficient of variation (CV)</b>	0.7554010067
<b>Kurtosis</b>	-0.3895227894
<b>Mean</b>	5.767
<b>Median Absolute Deviation (MAD)</b>	3
<b>Skewness</b>	0.6337870734
<b>Sum</b>	11534
<b>Variance</b>	18.9782001
<b>Monotocity</b>	Not monotonic

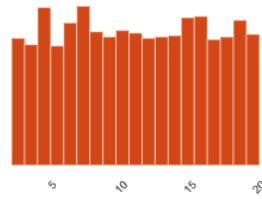
## talk\_time

Real number ( $R_{\geq 0}$ )

longest time that a single battery charge will last when you are

<b>Distinct</b>	19
<b>Distinct (%)</b>	0.9%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Infinite</b>	0
<b>Infinite (%)</b>	0.0%

<b>Mean</b>	11.011
<b>Minimum</b>	2
<b>Maximum</b>	20
<b>Zeros</b>	0
<b>Zeros (%)</b>	0.0%
<b>Memory size</b>	15.8 KiB



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Statistics

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### Quantile statistics

<b>Minimum</b>	2
<b>5-th percentile</b>	3
<b>Q1</b>	6
<b>median</b>	11
<b>Q3</b>	16
<b>95-th percentile</b>	20
<b>Maximum</b>	20
<b>Range</b>	18
<b>Interquartile range (IQR)</b>	10

### Descriptive statistics

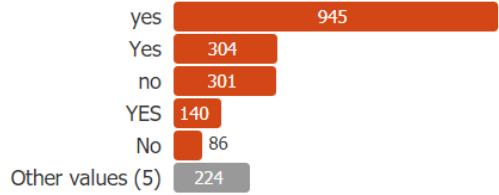
<b>Standard deviation</b>	5.463955198
<b>Coefficient of variation (CV)</b>	0.4962269728
<b>Kurtosis</b>	-1.218590963
<b>Mean</b>	11.011
<b>Median Absolute Deviation (MAD)</b>	5
<b>Skewness</b>	0.009511762222
<b>Sum</b>	22022
<b>Variance</b>	29.8548064
<b>Monotocity</b>	Not monotonic

## three\_g

Categorical

Has 3G or not

<b>Distinct</b>	10
<b>Distinct (%)</b>	0.5%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Memory size</b>	116.9 KiB



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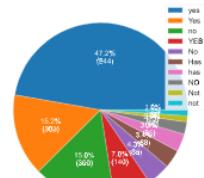
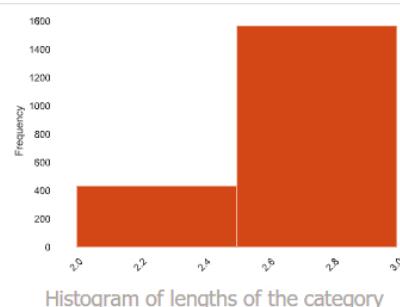
Overview

Categories

Words

Characters

Value	Count	Frequency (%)
yes	945	47.2%
Yes	304	15.2%
no	301	15.0%
YES	140	7.0%
No	86	4.3%
Has	68	3.4%
has	66	3.3%
NO	46	2.3%
Not	23	1.1%



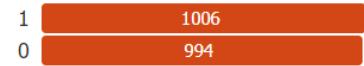
not 21 | 1.1%

### touch\_screen

Categorical

Has touch screen or not, 1 = yes,  
0 = no

<b>Distinct</b>	2
<b>Distinct (%)</b>	0.1%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Memory size</b>	113.4 KiB



[Toggle details](#)

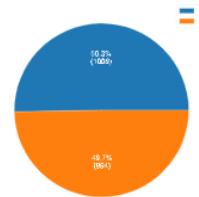
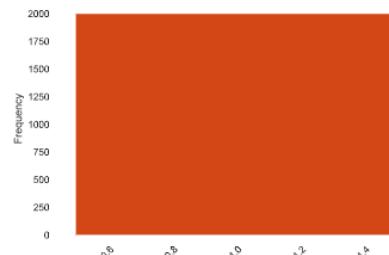
Overview

Categories

Words

Characters

Value	Count	Frequency (%)
1	1006	50.3%
0	994	49.7%



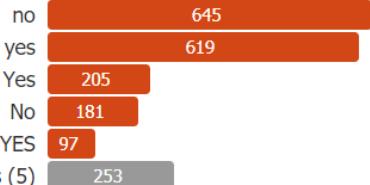
Histogram of lengths of the category

### wifi

Categorical

Has wifi or not

<b>Distinct</b>	10
<b>Distinct (%)</b>	0.5%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Memory size</b>	116.4 KiB



[Toggle details](#)

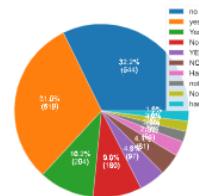
Overview

Categories

Words

Characters

Value	Count	Frequency (%)
no	645	32.2%
yes	619	30.9%
Yes	205	10.2%
No	181	9.0%
YES	97	4.9%
NO	81	4.0%
Has	55	2.8%
not	40	2.0%
Not	39	1.9%
has	38	1.9%



Histogram of lengths of the category

## price\_category

Categorical

This is the target variable with indicating if the mobile phone got a high price. 1 = yes, 0 = no

<b>Distinct</b>	2
<b>Distinct (%)</b>	0.1%
<b>Missing</b>	0
<b>Missing (%)</b>	0.0%
<b>Memory size</b>	113.4 KiB



Overview

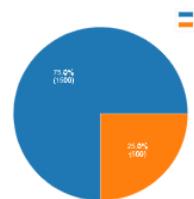
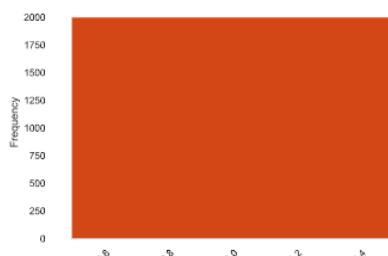
Categories

Words

Characters

Toggle details

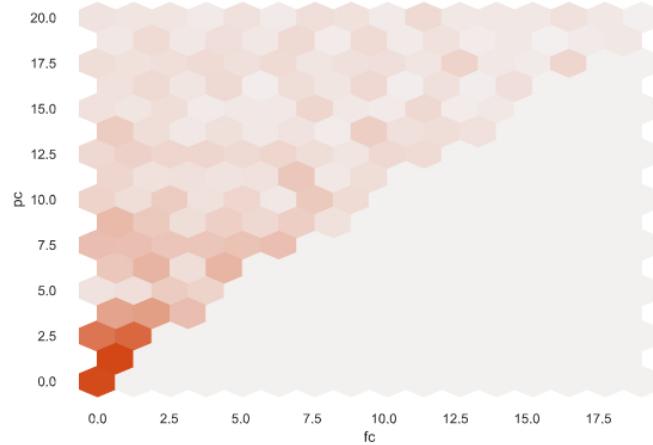
Value	Count	Frequency (%)
0	1500	75.0%
1	500	25.0%



## Interactions

id  
battery\_power  
clock\_speed  
fc  
int\_memory  
m\_dep  
mobile\_wt  
n\_cores  
pc  
px\_height  
px\_width  
ram  
sc\_h  
sc\_w  
talk\_time

id  
battery\_power  
clock\_speed  
fc  
int\_memory  
m\_dep  
mobile\_wt  
n\_cores  
pc  
px\_height  
px\_width  
ram  
sc\_h  
sc\_w  
talk\_time



## Correlations

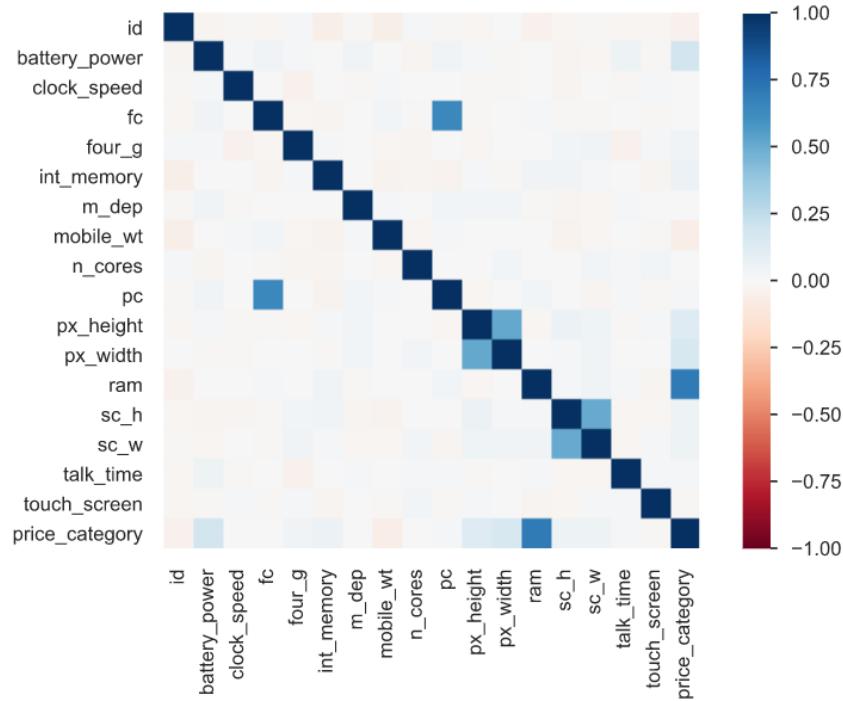
Pearson's r

Spearman's p

Kendall's T

Phik ( $\phi_k$ )Cramér's V ( $\phi_c$ )

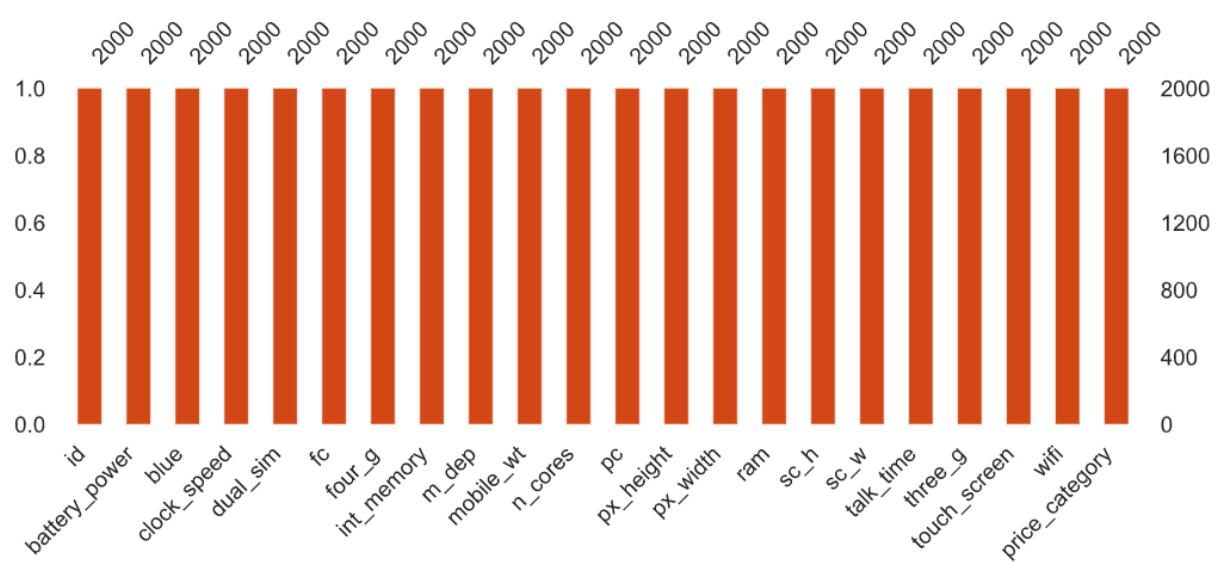
Toggle correlation descriptions



## Missing values

Count

Matrix



A simple visualization of nullity by column.

# Sample

## First rows

	<b>id</b>	<b>battery_power</b>	<b>blue</b>	<b>clock_speed</b>	<b>dual_sim</b>	<b>fc</b>	<b>four_g</b>	<b>int_memory</b>	<b>m_dep</b>	<b>mobile_wt</b>	<b>n_cores</b>	<b>pc</b>	<b>px_h</b>
<b>0</b>	0	842	no	2.2	no	1	0	7	0.6	188	2	2	20
<b>1</b>	1	1021	yes	0.5	YES	0	1	53	0.7	136	3	6	905
<b>2</b>	2	563	yes	0.5	Yes	2	1	41	0.9	145	5	6	1263
<b>3</b>	3	615	has	2.5	no	0	0	10	0.8	131	6	9	1216
<b>4</b>	4	1821	yes	1.2	NO	13	1	44	0.6	141	2	14	1208
<b>5</b>	5	1859	No	0.5	yes	3	0	22	0.7	164	1	7	1004
<b>6</b>	6	1821	no	1.7	NO	4	1	10	0.8	139	8	10	381
<b>7</b>	7	1954	no	0.5	Yes	0	0	24	0.8	187	4	0	512
<b>8</b>	8	1445	yes	0.5	NO	0	0	53	0.7	174	7	14	386
<b>9</b>	9	509	yes	0.6	has	2	1	9	0.1	93	5	15	1137

## Last rows

	<b>id</b>	<b>battery_power</b>	<b>blue</b>	<b>clock_speed</b>	<b>dual_sim</b>	<b>fc</b>	<b>four_g</b>	<b>int_memory</b>	<b>m_dep</b>	<b>mobile_wt</b>	<b>n_cores</b>	<b>pc</b>
<b>1990</b>	1990	1617	yes	2.4	no	8	1	36	0.8	85	1	9
<b>1991</b>	1991	1882	no	2.0	no	11	1	44	0.8	113	8	19
<b>1992</b>	1992	674	has	2.9	yes	1	0	21	0.2	198	3	4
<b>1993</b>	1993	1467	yes	0.5	no	0	0	18	0.6	122	5	0
<b>1994</b>	1994	858	no	2.2	no	1	0	50	0.1	84	1	2
<b>1995</b>	1995	794	yes	0.5	yes	0	1	2	0.8	106	6	14
<b>1996</b>	1996	1965	yes	2.6	yes	0	0	39	0.2	187	4	3
<b>1997</b>	1997	1911	no	0.9	yes	1	1	36	0.7	108	8	3
<b>1998</b>	1998	1512	no	0.9	not	4	1	46	0.1	145	5	5
<b>1999</b>	1999	510	Yes	2.0	yes	5	1	45	0.9	168	6	16