In [ ]:
```
import pandas as pd
```

In [ ]:
```
data = pd.read_csv('C:\\Users\hp\Downloads\\01.Data Cleaning and Preprocessing.csv')
data
```

```
<>:1: SyntaxWarning: invalid escape sequence '\h'
<>:1: SyntaxWarning: invalid escape sequence '\h'
C:\Users\hp\AppData\Local\Temp\ipykernel_18412\2457711915.py:1: SyntaxWarning: invalid escape sequence '\h'
  data = pd.read_csv('C:\\Users\hp\Downloads\\01.Data Cleaning and Preprocessing.csv')
```

Out [ ]:

	Observation	Y-Kappa	ChipRate	BF-CMratio	BlowFlow	ChipLevel4	T-upperExt-2	T-lowerExt-2	UCZAA	WhiteFlow-4	...	SteamFlow-4	Lower-HeatT-3	Upper-HeatT-3	ChipMass-4	WeakLiquoF	BlackFlow-2	WeakWashF	SteamHeatF-3	T-Top-Chips-4	SulphidityL-4
0	31-00:00	23.10	16.520	121.717	1177.607	169.805	358.282	329.545	1.443	599.253	NaN	...	67.122	329.432	303.099	175.964	1127.197	1319.039	257.325	54.612	252.077	NaN
1	31-01:00	27.60	16.810	79.022	1328.360	341.327	351.050	329.067	1.549	537.201	6.076	...	60.012	330.823	304.879	163.202	665.975	1297.317	241.182	46.603	251.406	29.11
2	31-02:00	23.19	16.709	79.562	1329.407	239.161	350.022	329.260	1.600	549.611	NaN	...	61.304	329.140	303.383	164.013	677.534	1327.072	237.272	51.795	251.335	NaN
3	31-03:00	23.60	16.478	81.011	1334.877	213.527	350.938	331.142	1.604	623.362	6.054	...	68.496	328.875	302.254	181.487	767.853	1324.461	239.478	54.846	250.312	29.02
4	31-04:00	22.90	15.618	93.244	1334.168	243.131	351.640	332.709	NaN	638.672	6.110	...	70.022	328.352	300.954	183.929	888.448	1343.424	215.372	54.186	249.916	29.01
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
319	10-16:00	23.75	12.667	93.450	1178.252	276.955	347.286	310.970	1.523	513.956	...	61.141	330.117	304.006	148.174	1027.201	1357.271	381.643	45.264	252.947	30.86
320	9-19:00	19.80	12.558	94.352	1184.119	297.071	399.135	319.576	1.451	570.058	...	67.667	330.848	304.616	165.178	906.962	1311.177	25.494	50.528	252.092	30.70
321	9-20:00	23.01	12.550	90.842	1188.517	289.826	373.633	314.591	1.457	549.306	...	66.446	330.226	304.686	160.841	887.125	1319.226	0.638	45.549	252.438	NaN
322	9-21:00	24.32	13.083	88.910	1192.879	318.006	364.081	308.559	1.523	504.852	...	61.054	327.346	304.363	147.589	804.423	1320.225	0.000	43.725	253.176	31.13
323	9-22:00	25.75	13.417	85.451	1186.342	248.312	356.289	310.482	1.474	497.375	...	58.247	328.092	304.093	144.218	828.328	1320.848	1.276	43.840	253.216	NaN

324 rows × 23 columns

In [ ]:
```
#Info function gives both data-type and total of non-null values of each column
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 324 entries, 0 to 323
Data columns (total 23 columns):
 #   Column          Non-Null Count  Dtype  
---  ------          --------------  -----  
 0   Observation     324 non-null    object 
 1   Y-Kappa         324 non-null    float64
 2   ChipRate        319 non-null    float64
 3   BF-CMratio      307 non-null    float64
 4   BlowFlow        308 non-null    float64
 5   ChipLevel4      323 non-null    float64
 6   T-upperExt-2    322 non-null    float64
 7   T-lowerExt-2    322 non-null    float64
 8   UCZAA           299 non-null    float64
 9   WhiteFlow-4     323 non-null    float64
 10  AAWhiteSt-4     173 non-null    float64
 11  AA-Wood-4       323 non-null    float64
 12  ChipMoisture-4  323 non-null    float64
 13  SteamFlow-4     322 non-null    float64
 14  Lower-HeatT-3   322 non-null    float64
 15  Upper-HeatT-3   322 non-null    float64
 16  ChipMass-4      323 non-null    float64
 17  WeakLiquoF      323 non-null    float64
 18  BlackFlow-2     322 non-null    float64
 19  WeakWashF       323 non-null    float64
 20  SteamHeatF-3    322 non-null    float64
 21  T-Top-Chips-4   323 non-null    float64
 22  SulphidityL-4   173 non-null    float64
dtypes: float64(22), object(1)
memory usage: 58.3+ KB
```

In [ ]:
```
#To print all the columns name
data.columns
```

Out [ ]:
```
Index(['Observation', 'Y-Kappa', 'ChipRate', 'BF-CMratio', 'BlowFlow',
       'ChipLevel4 ', 'T-upperExt-2 ', 'T-lowerExt-2 ', 'UCZAA', 
       'WhiteFlow-4 ', 'AAWhiteSt-4 ', 'AA-Wood-4 ', 'ChipMoisture-4 ',
       'SteamFlow-4 ', 'Lower-HeatT-3', 'Upper-HeatT-3 ', 'ChipMass-4 ',
       'WeakLiquoF ', 'BlackFlow-2 ', 'WeakWashF ', 'SteamHeatF-3 ',
       'T-Top-Chips-4 ', 'SulphidityL-4 '],
      dtype='object')
```

In [ ]:
```
#Deleting the column
data.drop(['Observation'], axis= 1, inplace = True )
```

In [ ]:
```
#Observation column is deleted
data.columns
```

Out [ ]:
```
Index(['Y-Kappa', 'ChipRate', 'BF-CMratio', 'BlowFlow', 'ChipLevel4 ',
       'T-upperExt-2 ', 'T-lowerExt-2 ', 'UCZAA', 'WhiteFlow-4 ',
       'AAWhiteSt-4 ', 'AA-Wood-4 ', 'ChipMoisture-4 ', 'SteamFlow-4 ',
       'Lower-HeatT-3', 'Upper-HeatT-3 ', 'ChipMass-4 ', 'WeakLiquoF ',
       'BlackFlow-2 ', 'WeakWashF ', 'SteamHeatF-3 ', 'T-Top-Chips-4 ',
       'SulphidityL-4 '],
      dtype='object')
```

In [ ]:
```
#Total number of null values in each column
data.isnull().sum()
```

Out [ ]:
```
Y-Kappa             0
ChipRate            5
BF-CMratio         17
BlowFlow           16
ChipLevel4          1
T-upperExt-2        2
T-lowerExt-2        2
UCZAA              25
WhiteFlow-4         1
AAWhiteSt-4       151
AA-Wood-4           1
ChipMoisture-4      1
SteamFlow-4         1
Lower-HeatT-3       2
Upper-HeatT-3       2
ChipMass-4          1
WeakLiquoF          1
BlackFlow-2         1
WeakWashF           1
SteamHeatF-3        2
T-Top-Chips-4       1
SulphidityL-4     151
dtype: int64
```

In [ ]:
```
#Total number of null values in dataset
data.isnull().sum().sum()
```

Out [ ]:
```
386
```

In [ ]:
```
#Droping all duplicates values in dataset
data = data.drop_duplicates()
data
```

Out [ ]:

	Y-Kappa	ChipRate	BF-CMratio	BlowFlow	ChipLevel4	T-upperExt-2	T-lowerExt-2	UCZAA	WhiteFlow-4	AAWhiteSt-4	...	SteamFlow-4	Lower-HeatT-3	Upper-HeatT-3	ChipMass-4	WeakLiquoF	BlackFlow-2	WeakWashF	SteamHeatF-3	T-Top-Chips-4	SulphidityL-4
0	23.10	16.520	121.717	1177.607	169.805	358.282	329.545	1.443	599.253	NaN	...	67.122	329.432	303.099	175.964	1127.197	1319.039	257.325	54.612	252.077	NaN
1	27.60	16.810	79.022	1328.360	341.327	351.050	329.067	1.549	537.201	6.076	...	60.012	330.823	304.879	163.202	665.975	1297.317	241.182	46.603	251.406	29.11
2	23.19	16.709	79.562	1329.407	239.161	350.022	329.260	1.600	549.611	NaN	...	61.304	329.140	303.383	164.013	677.534	1327.072	237.272	51.795	251.335	NaN
3	23.60	16.478	81.011	1334.877	213.527	350.938	331.142	1.604	623.362	6.054	...	68.496	328.875	302.254	181.487	767.853	1324.461	239.478	54.846	250.312	29.02
4	22.90	15.618	93.244	1334.168	243.131	351.640	332.709	NaN	638.672	6.110	...	70.022	328.352	300.954	183.929	888.448	1343.424	215.372	54.186	249.916	29.01
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
298	20.90	15.167	84.640	1283.706	339.440	354.803	311.041	1.635	532.419	6.340	...	65.561	332.924	307.626	145.299	832.906	1344.708	388.911	49.524	251.833	30.29
299	24.98	NaN	85.034	1278.345	368.564	357.723	321.387	NaN	520.365	6.220	...	65.729	332.523	307.169	151.544	905.639	1344.469	418.979	48.135	251.614	30.47
300	21.00	NaN	88.013	1307.722	278.842	357.438	323.757	NaN	553.070	NaN	...	65.795	331.263	306.400	157.954	908.691	1344.588	462.712	54.373	251.197	NaN
301	21.40	NaN	85.490	1255.986	273.464	361.365	322.689	NaN	590.199	6.230	...	71.456	333.032	308.732	174.069	986.206	1348.747	457.313	53.194	251.324	30.46
307	20.89	14.308	94.172	1327.832	251.120	351.263	332.485	1.522	631.514	NaN	...	71.286	328.699	300.706	180.229	903.605	1323.082	232.729	54.503	250.084	NaN

301 rows × 22 columns

In [ ]:
```
#Detecting and removing the outlires in dataset
q1 = data.quantile(0.25)
q3 = data.quantile(0.75)
iqr = q3 - q1

lower_bound = q1 - (1.5*iqr)
upper_bound = q3 + (1.5*iqr)

outlires = data[(data < lower_bound)|(data > upper_bound)] #outlires

data_no_outlires = data[(data > lower_bound)&(data < upper_bound)] #dataset with no outlires
print(data_no_outlires)
```

```
     Y-Kappa  ChipRate  BF-CMratio  BlowFlow  ChipLevel4   T-upperExt-2   \
0       23.10     16.520         NaN  1177.607     169.805        358.282   
1       27.60     16.810      79.022  1328.360     341.327        351.050   
2       23.19     16.709      79.562  1329.407     239.161        350.022   
3       23.60     16.478      81.011  1334.877     213.527        350.938   
4       22.90     15.618      93.244  1334.168     243.131        351.640   
..        ...        ...         ...       ...         ...            ...   
298     20.90     15.167      84.640  1283.706     339.440        354.803   
299     24.98        NaN      85.034  1278.345     368.564        357.723   
300     21.00        NaN      88.013  1307.722     278.842        357.438   
301     21.40        NaN      85.490  1255.986     273.464        361.365   
307     20.89     14.308      94.172  1327.832     251.120        351.263   

     T-lowerExt-2   UCZAA  WhiteFlow-4  AAWhiteSt-4  ...  SteamFlow-4  \
0         329.545   1.443      599.253          NaN  ...       67.122   
1         329.067   1.549      537.201        6.076  ...       60.012   
2         329.260   1.600      549.611          NaN  ...       61.304   
3         331.142   1.604      623.362        6.054  ...       68.496   
4         332.709     NaN      638.672        6.110  ...       70.022   
..            ...     ...          ...          ...  ...          ...   
298       311.041   1.635      532.419        6.340  ...       65.561   
299       321.387     NaN      520.365        6.220  ...       65.729   
300       323.757     NaN      553.070          NaN  ...       65.795   
301       322.689     NaN      590.199        6.230  ...       71.456   
307       332.485   1.522      631.514          NaN  ...       71.286   

     Lower-HeatT-3  Upper-HeatT-3  ChipMass-4  WeakLiquoF  BlackFlow-2  \
0          329.432        303.099     175.964    1127.197     1319.039   
1          330.823        304.879     163.202     665.975     1297.317   
2          329.140        303.383     164.013     677.534     1327.072   
3          328.875        302.254     181.487     767.853     1324.461   
4          328.352        300.954     183.929     888.448     1343.424   
..             ...            ...         ...         ...          ...   
298        332.924        307.626     145.299     832.906     1344.708   
299        332.523        307.169     151.544     905.639     1344.469   
300        331.263        306.400     157.954     908.691     1344.588   
301        333.032        308.732     174.069     986.206     1348.747   
307        328.699        300.706     180.229     903.605     1323.082   

     WeakWashF  SteamHeatF-3  T-Top-Chips-4  SulphidityL-4  
0      257.325        54.612        252.077            NaN  
1      241.182        46.603        251.406          29.11  
2      237.272        51.795        251.335            NaN  
3      239.478        54.846        250.312          29.02  
4      215.372        54.186        249.916            NaN  
..         ...           ...            ...            ...  
298    388.911        49.524        251.833          30.29  
299    418.979        48.135        251.614          30.47  
300    462.712        54.373        251.197            NaN  
301    457.313        53.194        251.324          30.46  
307    232.729        54.503        250.084            NaN  

[301 rows x 22 columns]
```

In [ ]:
```
#Droping all the rows that will null values
data_no_outlires.dropna()
```

Out [ ]:

	Y-Kappa	ChipRate	BF-CMratio	BlowFlow	ChipLevel4	T-upperExt-2	T-lowerExt-2	UCZAA	WhiteFlow-4	AAWhiteSt-4	...	SteamFlow-4	Lower-HeatT-3	Upper-HeatT-3	ChipMass-4	WeakLiquoF	BlackFlow-2	WeakWashF	SteamHeatF-3	T-Top-Chips-4	SulphidityL-4
1	27.60	16.810	79.022	1328.360	341.327	351.050	329.067	1.549	537.201	6.076	...	60.012	330.823	304.879	163.202	665.975	1297.317	241.182	46.603	251.406	29.11
3	23.60	16.478	81.011	1334.877	213.527	350.938	331.142	1.604	623.362	6.054	...	68.496	328.875	302.254	181.487	767.853	1324.461	239.478	54.846	250.312	29.02
5	14.23	15.350	85.518	1171.604	198.538	344.014	325.195	1.436	628.245	6.020	...	65.225	322.103	296.517	165.814	826.243	907.641	595.875	52.807	249.580	30.34
7	22.65	14.100	91.887	1307.852	288.989	352.321	331.162	1.468	625.549	6.143	...	71.298	329.662	301.539	179.886	837.178	1315.111	234.047	53.805	249.971	29.22
9	24.70	13.850	96.206	1334.892	362.511	352.372	327.358	1.515	553.172	6.199	...	64.249	332.264	305.419	166.120	909.810	1318.725	180.375	48.842	251.121	29.21
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
270	21.25	14.192	91.907	1286.693	346.418	349.544	316.284	1.596	551.442	6.180	...	68.053	332.175	308.950	158.412	1038.187	1366.592	278.115	50.512	252.504	30.47
274	23.17	15.542	82.392	1280.501	334.242	348.771	316.870	1.596	558.715	6.220	...	68.318	331.510	309.023	156.631	859.558	1367.960	300.409	49.837	252.626	30.48
276	22.70	15.517	83.008	1288.010	306.886	350.155	322.485	1.590	568.752	6.170	...	67.678	331.854	309.346	160.061	910.013	1381.389	441.934	51.466	252.216	29.59
296	20.50	13.358	97.662	1304.597	377.678	347.672	313.147	1.546	496.460	6.340	...	60.119	332.615	308.575	141.076	997.904	1334.703	389.497	46.206	252.423	30.43
298	20.90	15.167	84.640	1283.706	339.440	354.803	311.041	1.635	532.419	6.340	...	65.561	332.924	307.626	145.299	832.906	1344.708	388.911	49.524	251.833	30.29

107 rows × 22 columns

In [ ]:
```
#Replacing the null values by its following value or by its preceding value
data_no_outlires = data_no_outlires.bfill() #backwardfill
data_no_outlires = data_no_outlires.ffill() #forwardfill
data_no_outlires
```

Out [ ]:

	Y-Kappa	ChipRate	BF-CMratio	BlowFlow	ChipLevel4	T-upperExt-2	T-lowerExt-2	UCZAA	WhiteFlow-4	AAWhiteSt-4	...	SteamFlow-4	Lower-HeatT-3	Upper-HeatT-3	ChipMass-4	WeakLiquoF	BlackFlow-2	WeakWashF	SteamHeatF-3	T-Top-Chips-4	SulphidityL-4
0	23.10	16.520	79.022	1177.607	169.805	358.282	329.545	1.443	599.253	6.076	...	67.122	329.432	303.099	175.964	1127.197	1319.039	257.325	54.612	252.077	29.11
1	27.60	16.810	79.022	1328.360	341.327	351.050	329.067	1.549	537.201	6.076	...	60.012	330.823	304.879	163.202	665.975	1297.317	241.182	46.603	251.406	29.11
2	23.19	16.709	79.562	1329.407	239.161	350.022	329.260	1.600	549.611	6.054	...	61.304	329.140	303.383	164.013	677.534	1327.072	237.272	51.795	251.335	29.02
3	23.60	16.478	81.011	1334.877	213.527	350.938	331.142	1.604	623.362	6.054	...	68.496	328.875	302.254	181.487	767.853	1324.461	239.478	54.846	250.312	29.02
4	22.90	15.618	93.244	1334.168	243.131	351.640	332.709	NaN	638.672	6.110	...	70.022	328.352	300.954	183.929	888.448	1343.424	215.372	54.186	249.916	29.01
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
298	20.90	15.167	84.640	1283.706	339.440	354.803	311.041	1.635	532.419	6.340	...	65.561	332.924	307.626	145.299	832.906	1344.708	388.911	49.524	251.833	30.29
299	24.98	14.308	85.034	1278.345	368.564	357.723	321.387	1.522	520.365	6.220	...	65.729	332.523	307.169	151.544	905.639	1344.469	418.979	48.135	251.614	30.47
300	21.00	14.308	88.013	1307.722	278.842	357.438	323.757	1.522	553.070	6.230	...	65.795	331.263	306.400	157.954	908.691	1344.588	462.712	54.373	251.197	NaN
301	21.40	14.308	85.490	1255.986	273.464	361.365	322.689	1.522	590.199	6.230	...	71.456	333.032	308.732	174.069	986.206	1348.747	457.313	53.194	251.324	30.46
307	20.89	14.308	94.172	1327.832	251.120	351.263	332.485	1.522	631.514	NaN	...	71.286	328.699	300.706	180.229	903.605	1323.082	232.729	54.503	250.084	NaN

301 rows × 22 columns

In [ ]:
```
#Checking is there any null values in the dataset.
data_no_outlires.isnull().sum().sum()
```

Out [ ]:
```
0
```

In [ ]:
```
#Describe function gives the summary statistics of dataset
data_no_outlires.describe()
```

Out [ ]:

	Y-Kappa	ChipRate	BF-CMratio	BlowFlow	ChipLevel4	T-upperExt-2	T-lowerExt-2	UCZAA	WhiteFlow-4	AAWhiteSt-4	...	SteamFlow-4	Lower-HeatT-3	Upper-HeatT-3	ChipMass-4	WeakLiquoF	BlackFlow-2	WeakWashF	SteamHeatF-3	T-Top-Chips-4	SulphidityL-4
count	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	...	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000	301.000000
mean	20.568605	14.337565	86.937296	1240.418412	268.989761	357.194605	324.556246	1.493272	593.044704	6.146346	...	66.885787	325.381272	300.386043	162.292295	876.333801	1170.471375	266.819492	49.699302	251.220252	30.453047
std	2.990751	1.473287	6.815955	61.889764	74.818251	8.313861	6.171239	0.101936	66.862119	0.078591	...	5.546581	4.633449	4.640049	13.52897	120.403619	149.047109	163.422026	4.536224	1.301328	0.622187
min	12.170000	10.625000	68.645000	1078.498000	61.783000	339.168000	310.421000	1.234000	405.111000	5.940000	...	50.663000	318.051000	293.312000	124.68200	537.597000	838.948000	0.000000	38.283000	248.359000	29.020000
25%	18.450000	13.358000	81.824000	1193.646000	221.306000	350.317000	321.539000	1.431000	543.235000	6.095000	...	62.860000	321.235000	296.435000	152.91800	791.758000	1038.527000	142.531000	46.379000	250.287000	30.130000
50%	20.740000	14.308000	86.985000	1254.380000	276.955000	357.194000	325.669000	1.499000	594.218000	6.140000	...	67.824000	323.285000	298.517000	163.512000	868.255000	1144.876000	280.910000	50.253000	251.345000	30.400000
75%	23.000000	15.483000	92.194000	1288.104000	329.008000	362.372000	329.133000	1.559000	642.944000	6.200000	...	71.649000	329.811000	304.220000	172.26500	969.726000	1318.602000	405.953000	53.299000	252.331000	30.820000
max	27.600000	16.958000	105.911000	1351.240000	419.014000	376.857000	337.012000	1.747000	731.394000	6.340000	...	76.147000	333.854000	311.146000	189.26800	1226.277000	1395.767000	715.715000	63.332000	254.122000	31.910000

8 rows × 22 columns

In [ ]:
```
#Now this is our clean dataset
data_no_outlires
```

Out [ ]:

	Y-Kappa	ChipRate	BF-CMratio	BlowFlow	ChipLevel4	T-upperExt-2	T-lowerExt-2	UCZAA	WhiteFlow-4	AAWhiteSt-4	...	SteamFlow-4	Lower-HeatT-3	Upper-HeatT-3	ChipMass-4	WeakLiquoF	BlackFlow-2	WeakWashF	SteamHeatF-3	T-Top-Chips-4	SulphidityL-4
0	23.10	16.520	79.022	1177.607	169.805	358.282	329.545	1.443	599.253	6.076	...	67.122	329.432	303.099	175.964	1127.197	1319.039	257.325	54.612	252.077	29.11
1	27.60	16.810	79.022	1328.360	341.327	351.050	329.067	1.549	537.201	6.076	...	60.012	330.823	304.879	163.202	665.975	1297.317	241.182	46.603	251.406	29.11
2	23.19	16.709	79.562	1329.407	239.161	350.022	329.260	1.600	549.611	6.054	...	61.304	329.140	303.383	164.013	677.534	1327.072	237.272	51.795	251.335	29.02
3	23.60	16.478	81.011	1334.877	213.527	350.938	331.142	1.604	623.362	6.054	...	68.496	328.875	302.254	181.487	767.853	1324.461	239.478	54.846	250.312	29.02
4	22.90	15.618	93.244	1334.168	243.131	351.640	332.709	1.436	638.672	6.110	...	70.022	328.352	300.954	183.929	888.448	1343.424	215.372	54.186	249.916	30.34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
298	20.90	15.167	84.640	1283.706	339.440	354.803	311.041	1.635	532.419	6.340	...	65.561	332.924	307.626	145.299	832.906	1344.708	388.911	49.524	251.833	30.29
299	24.98	14.308	85.034	1278.345	368.564	357.723	321.387	1.522	520.365	6.220	...	65.729	332.523	307.169	151.544	905.639	1344.469	418.979	48.135	251.614	30.47
300	21.00	14.308	88.013	1307.722	278.842	357.438	323.757	1.522	553.070	6.230	...	65.795	331.263	306.400	157.954	908.691	1344.588	462.712	54.373	251.197	NaN
301	21.40	14.308	85.490	1255.986	273.464	361.365	322.689	1.522	590.199	6.230	...	71.456	333.032	308.732	174.069	986.206	1348.747	457.313	53.194	251.324	30.46
307	20.89	14.308	94.172	1327.832	251.120	351.263	332.485	1.522	631.514	6.230	...	71.286	328.699	300.706	180.229	903.605	1323.082	232.729	54.503	250.084	NaN

301 rows × 22 columns