

```
File Edit View Insert Cell Kernel Widgets Help
+ % Run Code
In [26]: 1 import pandas as pd
In [27]: 1 data=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Fundamentals-of-statistics-and
In [28]: 1 data
Out[28]:
```

	Month	Starting Balance	Repayment	Interest Paid	Principal Paid	New Balance	term	interest_rate	car_type
0	1	34689.96	687.23	202.93	484.30	34205.66	60	0.0702	Toyota Sienna
1	2	34205.66	687.23	200.10	487.13	33718.53	60	0.0702	Toyota Sienna
2	3	33718.53	687.23	197.25	489.98	33228.55	60	0.0702	Toyota Sienna
3	4	33228.55	687.23	194.38	492.85	32735.70	60	0.0702	Toyota Sienna
4	5	32735.70	687.23	191.50	495.73	32239.97	60	0.0702	Toyota Sienna
...	...	...	...	...	...	...	...	...	...
403	56	3164.64	796.01	9.54	786.47	2376.27	60	0.0290	VW Golf R
404	57	2376.27	796.01	7.64	788.37	1586.00	60	0.0290	VW Golf R
405	58	1586.00	796.01	5.74	790.27	793.82	60	0.0290	VW Golf R
406	59	793.82	796.01	3.83	792.18	-0.23	60	0.0290	VW Golf R
407	60	-0.23	796.01	1.91	794.10		60	0.0290	VW Golf R

408 rows x 9 columns

```
In [29]: 1 data.describe()
Out[29]:
```

	Month	Starting Balance	Repayment	Interest Paid	Principal Paid	New Balance	term	interest_rate	car_type
--	-------	------------------	-----------	---------------	----------------	-------------	------	---------------	----------

Edit View Insert Cell Kernel Widgets Help

Not Trusted

A toolbar with icons for adding (+), deleting (scissors), copying (two overlapping squares), pasting (one square with an arrow), undo (up arrow), redo (down arrow), a 'Run' button with a play icon, a 'Code' button with a square icon, and a dropdown arrow.

```
In [26]: 1 import pandas as pd
```

```
In [27]: 1 data=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Fundamentals-of-statistics-and-probability/main
```

```
In [28]: 1 data
```

```
Out[28]:
```

0	1	34689.96	687.23	202.93	484.30	34205.66	60	0.0702	Toyota Sienna
1	2	34205.66	687.23	200.10	487.13	33718.53	60	0.0702	Toyota Sienna
2	3	33718.53	687.23	197.25	489.98	33228.55	60	0.0702	Toyota Sienna
3	4	33228.55	687.23	194.38	492.85	32735.70	60	0.0702	Toyota Sienna
4	5	32735.70	687.23	191.50	495.73	32239.97	60	0.0702	Toyota Sienna
...	...	...	...	...	...	...	...	...	...
403	56	3951.11	796.01	9.54	786.47	3164.64	60	0.0290	VW Golf R
404	57	3164.64	796.01	7.64	788.37	2376.27	60	0.0290	VW Golf R
405	58	2376.27	796.01	5.74	790.27	1586.00	60	0.0290	VW Golf R
406	59	1586.00	796.01	3.83	792.18	793.82	60	0.0290	VW Golf R
407	60	793.82	796.01	1.91	794.10	-0.28	60	0.0290	VW Golf R

408 rows x 9 columns

```
In [29]: data.describe()
```

Month	Starting Balance	Repayment	Interest Paid	Principal Paid	New Balance	term	interest	rate
-------	------------------	-----------	---------------	----------------	-------------	------	----------	------



Edit View Insert Cell Kernel Widgets Help									
Not Trusted									
+ % Copy Paste Up Down Run Stop Refresh Code									
405	58	2376.27	796.01	5.74	790.27	1586.00	60	0.0290	VW Golf R
406	59	1586.00	796.01	3.83	792.18	793.82	60	0.0290	VW Golf R
407	60	793.82	796.01	1.91	794.10	-0.28	60	0.0290	VW Golf R

408 rows x 9 columns

In [29]: 1 data.describe()

Out[29]:

	Month	Starting Balance	Repayment	Interest Paid	Principal Paid	New Balance	term	interest_rate
count	408.000000	408.000000	408.000000	408.000000	408.000000	408.000000	408.000000	408.000000
mean	26.970588	17562.870343	712.134118	56.715123	655.418995	16907.451348	52.941176	0.039603
std	16.207776	11224.423084	247.447947	40.775353	245.361625	11168.974693	9.268926	0.013414
min	1.000000	395.410000	396.820000	1.280000	326.620000	-0.490000	36.000000	0.029000
25%	13.000000	8557.900000	486.740000	26.257500	476.972500	7832.080000	48.000000	0.029000
50%	26.000000	16262.230000	661.995000	50.640000	598.135000	15539.305000	60.000000	0.037450
75%	39.250000	25285.055000	796.010000	76.357500	760.790000	24535.925000	60.000000	0.039000
max	60.000000	44409.600000	1289.530000	202.930000	1286.430000	43720.910000	60.000000	0.070200

In [30]: 1 data[["Month", "Starting Balance", "Repayment"]].mean()

Out[30]: Month 26.970588  
Starting Balance 17562.870343  
Repayment 712.134118  
dtype: float64

In [31]: 1 data[["Month", "Starting Balance", "Repayment"]].median()

Out[31]: Month 26.000

25%	13.000000	8557.900000	486.740000	26.257500	476.972500	7832.080000	48.000000	0.029000
50%	26.000000	16262.230000	661.995000	50.640000	598.135000	15539.305000	60.000000	0.037450
75%	39.250000	25285.055000	796.010000	76.357500	760.790000	24535.925000	60.000000	0.038000
max	60.000000	44409.600000	1289.530000	202.930000	1286.430000	43720.910000	60.000000	0.070200

```
In [30]: 1 data[["Month", "Starting Balance", "Repayment"]].mean()
```

```
Out[30]: Month                26.970588
Starting Balance    17562.87443
Repayment           712.134118
dtype: float64
```

```
In [31]: 1 data[["Month", "Starting Balance", "Repayment"]].median()
```

```
Out[31]: Month                26.000
Starting Balance  16262.230
Repayment        661.995
dtype: float64
```

```
In [32]: 1 data[["Month", "Starting Balance", "Repayment"]].mode()
```

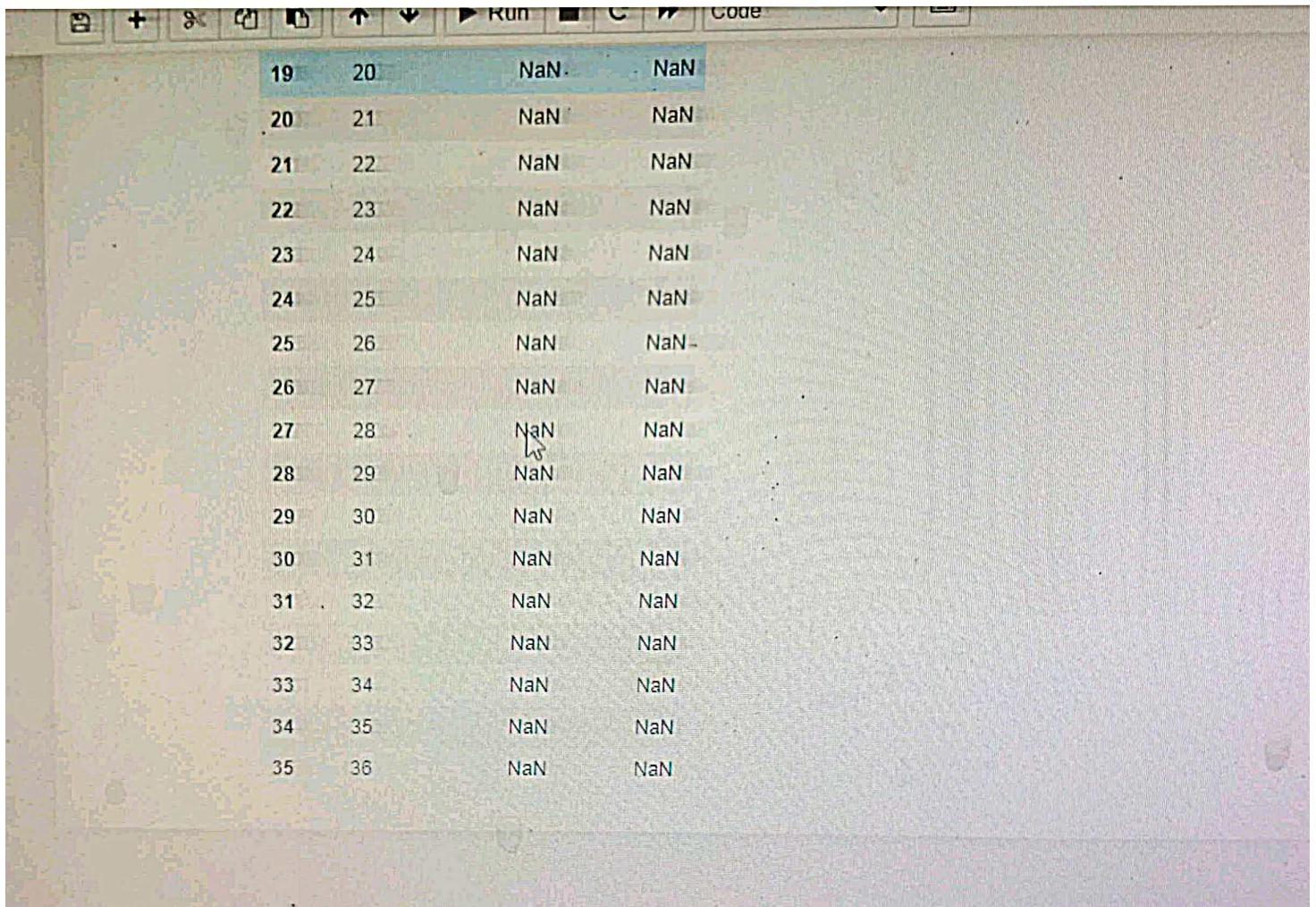
```
Out[32]:
```

Month	Starting Balance	Repayment
-------	------------------	-----------

0	1	21600.0	396.82
1	2	44409.6	632.47
2	3	NaN	687.23
3	4	NaN	796.01
4	5	NaN	NaN
5	6	NaN	NaN



# Jayachitra



19	20	NaN	NaN
20	21	NaN	NaN
21	22	NaN	NaN
22	23	NaN	NaN
23	24	NaN	NaN
24	25	NaN	NaN
25	26	NaN	NaN
26	27	NaN	NaN
27	28	NaN	NaN
28	29	NaN	NaN
29	30	NaN	NaN
30	31	NaN	NaN
31	32	NaN	NaN
32	33	NaN	NaN
33	34	NaN	NaN
34	35	NaN	NaN
35	36	NaN	NaN