statistis_assignment_5

March 14, 2022

[ ]:
```
import numpy as np
import pandas as pd
df = pd.read_csv("iris.csv")
df.head(4)
```

[ ]:

	sepal.length	sepal.width	petal.length	petal.width	variety
0	5.1	3.5	1.4	0.2	Setosa
1	4.9	3.0	1.4	0.2	Setosa
2	4.7	3.2	1.3	0.2	Setosa
3	4.6	3.1	1.5	0.2	Setosa

[ ]:
```
df.describe()
```

[ ]:

	sepal.length	sepal.width	petal.length	petal.width
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.057333	3.758000	1.199333
std	0.828066	0.435866	1.765298	0.762238
min	4.300000	2.000000	1.000000	0.100000
25%	5.100000	2.800000	1.600000	0.300000
50%	5.800000	3.000000	4.350000	1.300000
75%	6.400000	3.300000	5.100000	1.800000
max	7.900000	4.400000	6.900000	2.500000

[ ]:
```
df.mode()
```

[ ]:

	sepal.length	sepal.width	petal.length	petal.width	variety
0	5.0	3.0	1.4	0.2	Setosa
1	NaN	NaN	1.5	NaN	Versicolor
2	NaN	NaN	NaN	NaN	Virginica

[ ]:
```
df.median()
```

[ ]:
```
sepal.length    5.80
sepal.width     3.00
petal.length    4.35
petal.width     1.30
dtype: float64
```

[ ]:
```
df.mean()
```

[ ]:
```
sepal.length    5.843333
sepal.width     3.057333
petal.length    3.758000
petal.width     1.199333
dtype: float64
```

[ ]:
```
# With self based coding
price=[30,30,35,45,10,61,70,90,115]
n = sum(price)
x = len(price)
mean= n/x
```

[ ]:
```
mean
```

[ ]:
```
54.0
```

[ ]:
```
# with stats Lib
import statistics
statistics.mean(price)
```

[ ]:
```
54
```

[ ]:
```
statistics.mode(price)
```

[ ]:
```
30
```

[ ]:
```
statistics.median(price)
```

[ ]:
```
45
```

[ ]:
```
statistics.stdev(price)
```

[ ]:
```
33.26409475695979
```

[ ]:
```

```