

```
import numpy as np
import pandas as pd
import matplotlib as plt
import seaborn as sns
```

```
mydata="/content/insurance.csv"
```

```
insurance=pd.read_csv(mydata)
```

```
insurance.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1338 entries, 0 to 1337
Data columns (total 7 columns):
#   Column      Non-Null Count  Dtype
---  -
0   age         1338 non-null   int64
1   sex         1338 non-null   object
2   bmi         1338 non-null   float64
3   children    1338 non-null   int64
4   smoker      1338 non-null   object
5   region      1338 non-null   object
6   charges     1338 non-null   float64
dtypes: float64(2), int64(2), object(3)
memory usage: 73.3+ KB
```

```
insurance.describe()
```

	age	bmi	children	charges
count	1338.000000	1338.000000	1338.000000	1338.000000
mean	39.207025	30.663397	1.094918	13270.422265
std	14.049960	6.098187	1.205493	12110.011237
min	18.000000	15.960000	0.000000	1121.873900
25%	27.000000	26.296250	0.000000	4740.287150
50%	39.000000	30.400000	1.000000	9382.033000
75%	51.000000	34.693750	2.000000	16639.912515
max	64.000000	53.130000	5.000000	63770.428010

```
insurance.head()
```

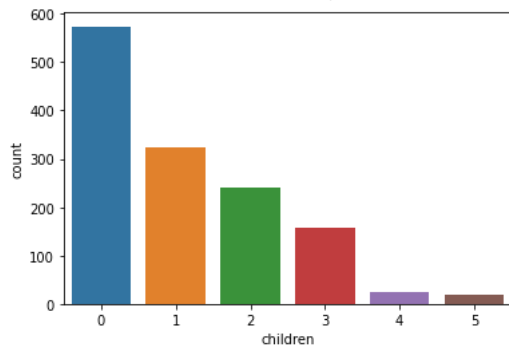
	age	sex	bmi	children	smoker	region	charges
0	19	female	27.900	0	yes	southwest	16884.92400
1	18	male	33.770	1	no	southeast	1725.55230
2	28	male	33.000	3	no	southeast	4449.46200
3	33	male	22.705	0	no	northwest	21984.47061
4	32	male	28.880	0	no	northwest	3866.85520

```
insurance.tail()
```

	age	sex	bmi	children	smoker	region	charges
1333	50	male	30.97	3	no	northwest	10600.5483
1334	18	female	31.92	0	no	northeast	2205.9808
1335	18	female	36.85	0	no	southeast	1629.8335
1336	21	female	25.80	0	no	southwest	2007.9450
1337	61	female	29.07	0	yes	northwest	29141.3603

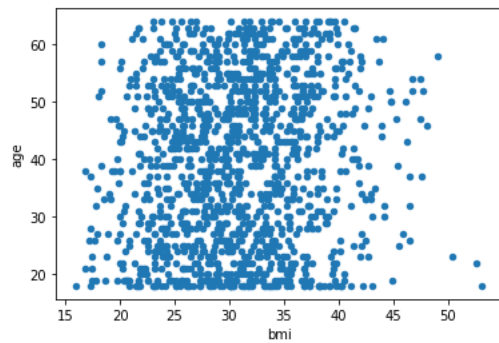
```
sns.countplot(insurance['children'])
```

```
/usr/local/lib/python3.8/dist-packages/seaborn/_decorators.py:36: FutureWarning: Pass the following var
warnings.warn(
<AxesSubplot:xlabel='children', ylabel='count'>
```



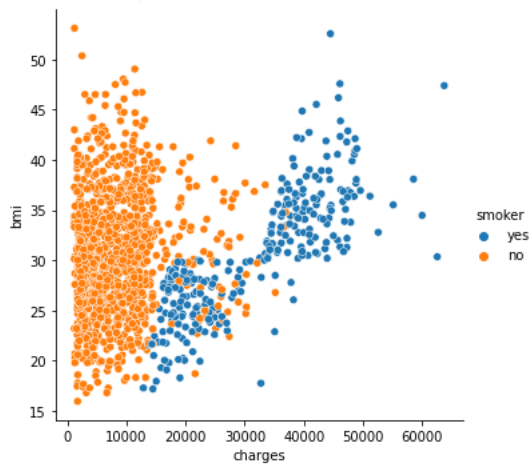
```
insurance.plot(kind="scatter",x='bmi',y='age')
```

```
<AxesSubplot:xlabel='bmi', ylabel='age'>
```



```
sns.relplot(y='bmi',x='charges',hue='smoker',data=insurance)
```

```
<seaborn.axisgrid.FacetGrid at 0x7fc1969bb6a0>
```



```
insurance[['bmi']].boxplot()
```

```
<AxesSubplot:~>
insurance[['charges']].boxplot()
```

