

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

```
df = pd.read_csv('/content/insurance.csv')
df.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

```
sns.distplot(df.age)
```

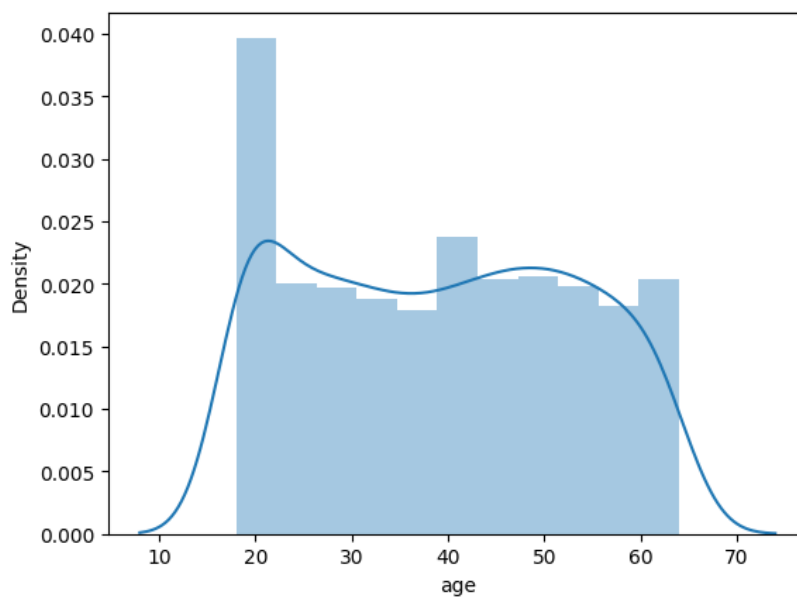
<ipython-input-4-36725a16e635>:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

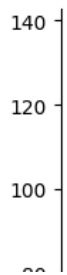
For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>

```
sns.distplot(df.age)
<Axes: xlabel='age', ylabel='Density'>
```



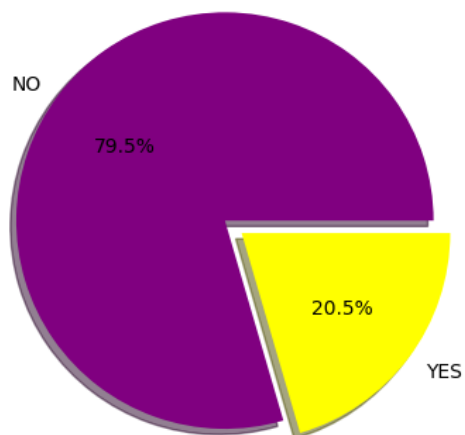
```
sns.displot(df.bmi)
```

```
<seaborn.axisgrid.FacetGrid at 0x79f343cbcd10>
```



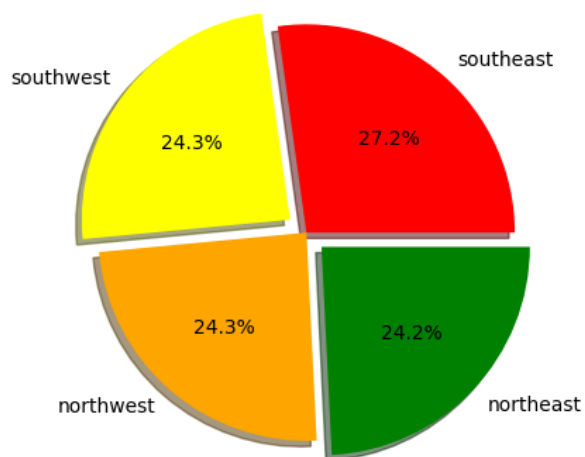
```
plt.pie(df.smoker.value_counts(), [0,0.1], labels = ['NO', 'YES'], autopct = '%1.1f%%', shadow = True, colors = ['purple', 'yellow'])
plt.title('SMOKER')
plt.show()
```

SMOKER



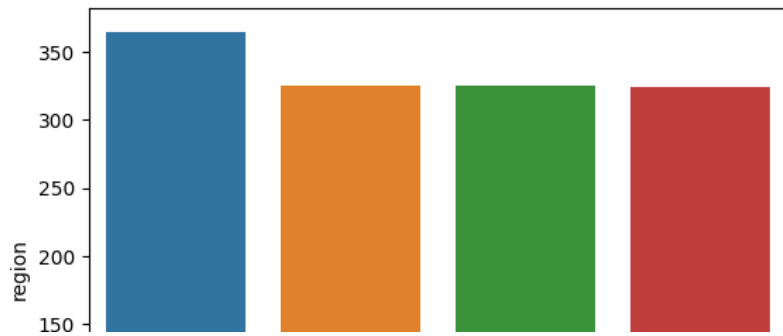
```
plt.pie(df.region.value_counts(), [0,0.1,0,0.1], labels = ['southeast', 'southwest', 'northwest', 'northeast'], autopct = '%1.1f%%')
plt.title('REGION')
plt.show()
```

REGION



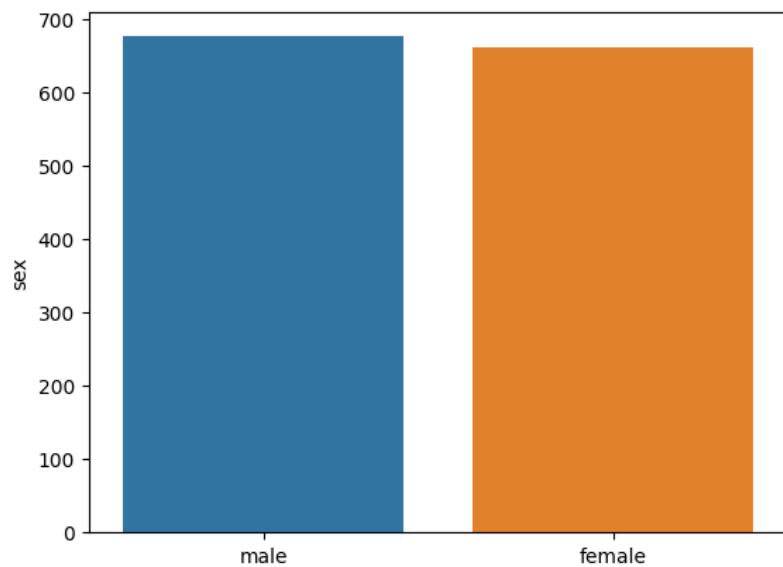
```
sns.barplot(x =df.region.value_counts().index,y =df.region.value_counts() )
```

```
<Axes: ylabel='region'>
```



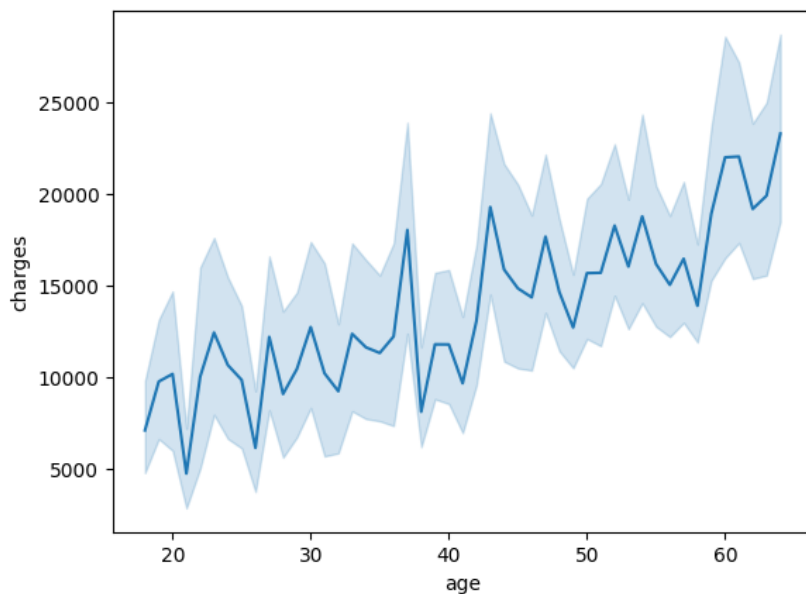
```
sns.barplot(x =df.sex.value_counts().index,y =df.sex.value_counts() )
```

```
<Axes: ylabel='sex'>
```



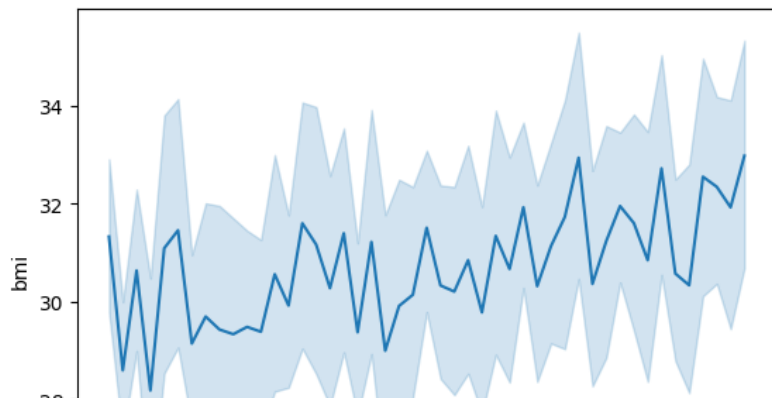
```
sns.lineplot(x = df.age,y=df.charges)
```

```
<Axes: xlabel='age', ylabel='charges'>
```



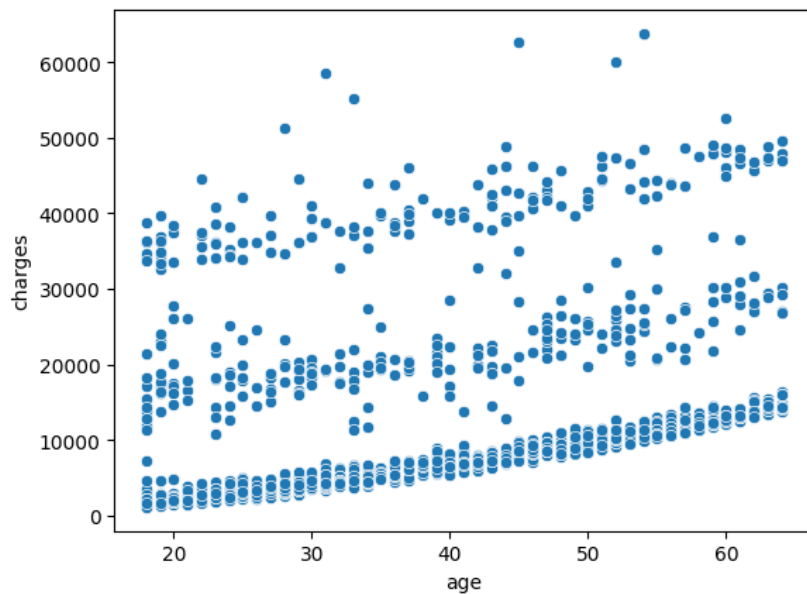
```
sns.lineplot(x = df.age,y=df.bmi)
```

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



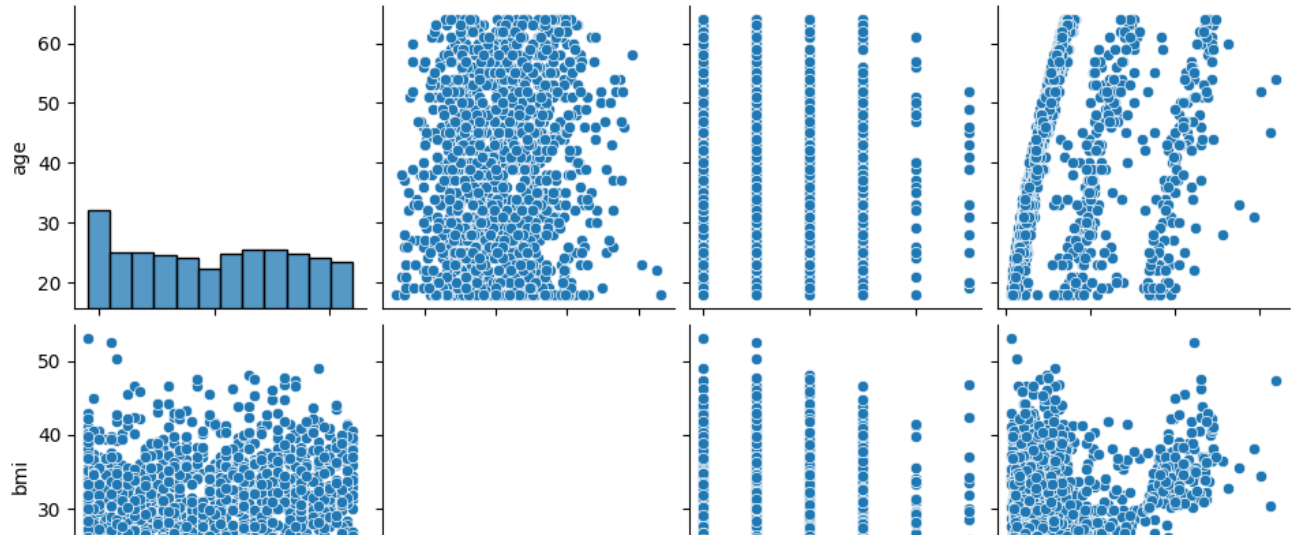
```
sns.scatterplot(x = df.age,y=df.charges)
```

```
<Axes: xlabel='age', ylabel='charges'>
```



```
sns.pairplot(df)
```

<seaborn.axisgrid.PairGrid at 0x79f307625db0>



sns.heatmap(df.corr(),annot=True)

<ipython-input-14-8df7bcac526d>:1: FutureWarning: The default value of numeric\_only is deprecated.  
sns.heatmap(df.corr(),annot=True)  
<Axes: >

