In [1]:

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

In [6]:

```
df=pd.read_csv('D://datascience//insurance.csv' )
```

In [7]:

```
df.head()
```

Out[7]:

	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

In [8]:

```
df.corr()
```

Out[8]:

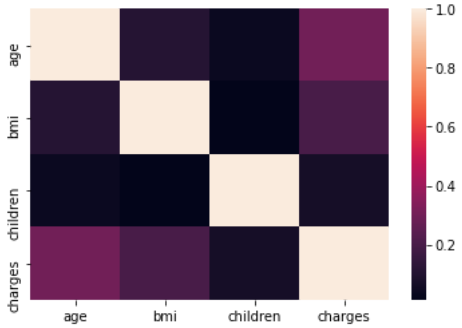
	age	bmi	children	charges
age	1.000000	0.109272	0.042469	0.299008
bmi	0.109272	1.000000	0.012759	0.198341
children	0.042469	0.012759	1.000000	0.067998
charges	0.299008	0.198341	0.067998	1.000000

In [9]:

```
sns.heatmap(df.corr())
```

Out[9]:

<AxesSubplot:>

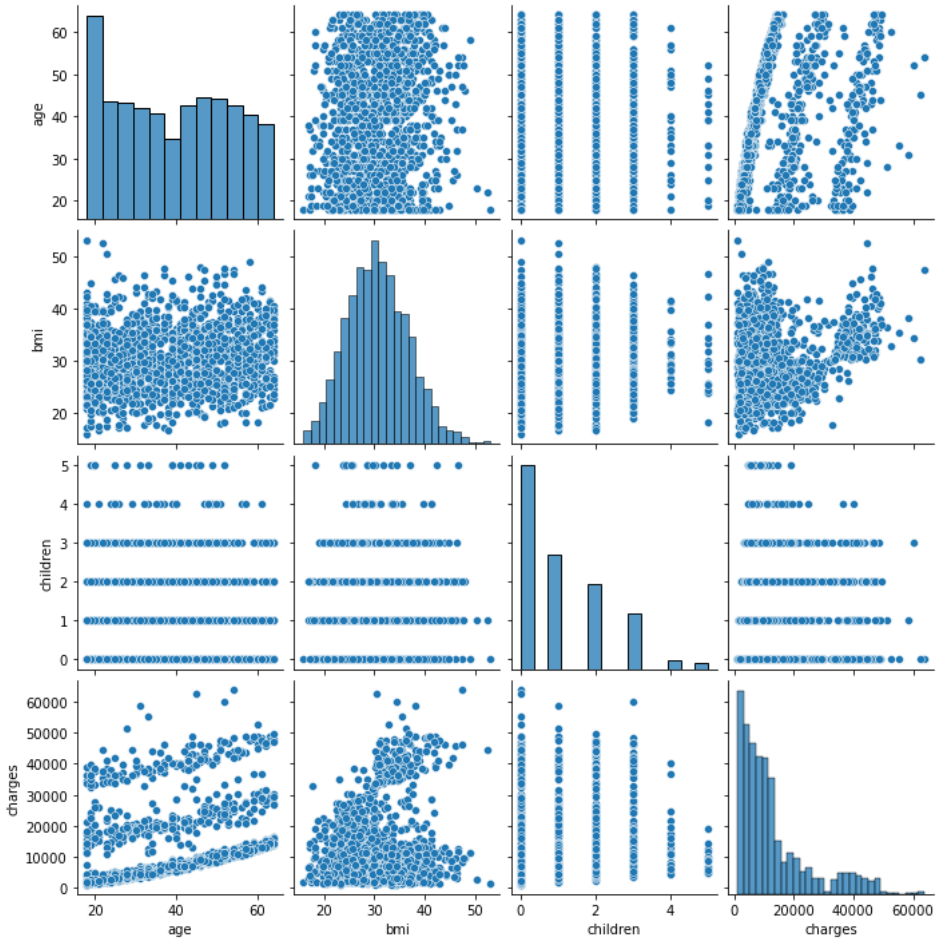


In [10]:

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

Out[10]:

<seaborn.axisgrid.PairGrid at 0x204dd79fac0>



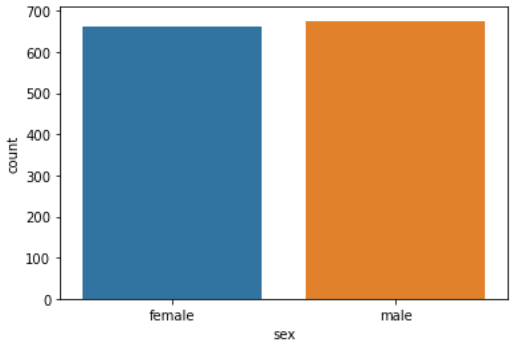
In [11]:

```
sns.countplot('sex',data=df)
```

C:\Users\DGVC\anaconda3\lib\site-packages\seaborn_decorators.py:36: FutureWarning: Pass the following variable as a keyword arg: x. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.
  warnings.warn(

Out[11]:

<AxesSubplot:xlabel='sex', ylabel='count'>



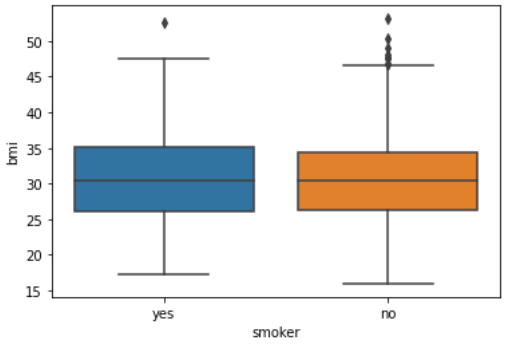
In [12]:

```
sns.boxplot('smoker','bmi', data=df)
```

```
C:\Users\DGVC\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the following variables as keyword args: x, y. From version
0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.
  warnings.warn(
```

Out[12]:

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

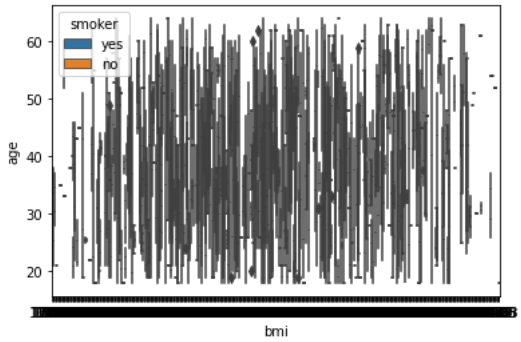


In [17]:

```
sns.boxplot(x="bmi", y="age", hue="smoker",data=df)
```

Out[17]:

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



In [ ]: