In [1]:

```
import pandas as pd
import numpy as np
data=pd.read_csv("insurance.csv")
data
```

Out[1]:

	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
...	...	...	...	...	...	...	...
1333	50	male	30.970	3	no	northwest	10600.54830
1334	18	female	31.920	0	no	northeast	2205.98080
1335	18	female	36.850	0	no	southeast	1629.83350
1336	21	female	25.800	0	no	southwest	2007.94500
1337	61	female	29.070	0	yes	northwest	29141.36030

1338 rows × 7 columns

In [2]:

```
data.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
```

In [3]:

```
data.describe()
```

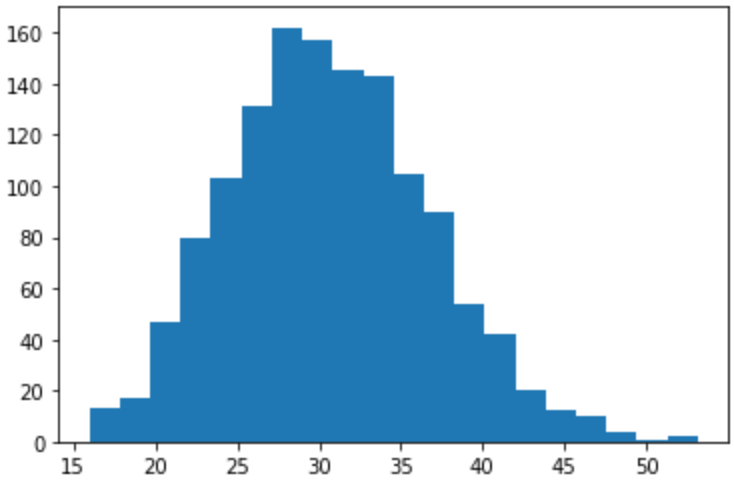
Out[3]:

	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

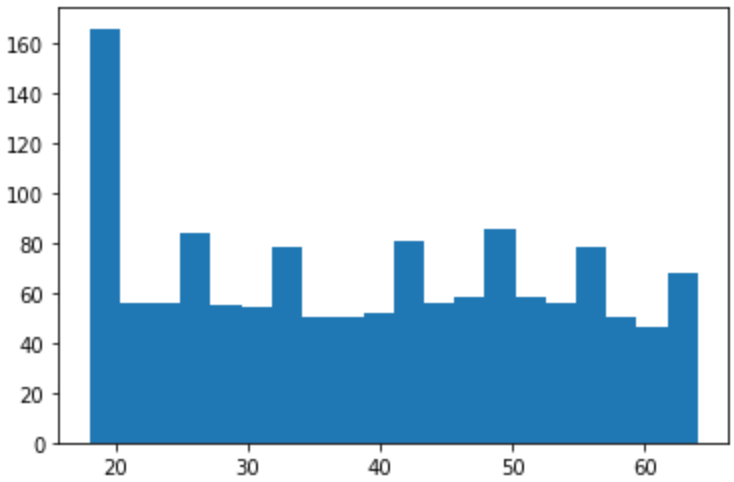
	age	bmi	children	charges
75%	51.000000	34.693750	2.000000	16639.912515
max	64.000000	53.130000	5.000000	63770.428010

In [4]:
```
import matplotlib.pyplot as plt
plt.hist(data.bmi,bins=20)
```

Out[4]:
```
(array([ 13.,  17.,  47.,  80., 103., 131., 162., 157., 145., 143., 105.,
         90.,  54.,  42.,  20.,  12.,  10.,   4.,   1.,   2.]),
 array([15.96  , 17.8185, 19.677 , 21.5355, 23.394 , 25.2525, 27.111 ,
        28.9695, 30.828 , 32.6865, 34.545 , 36.4035, 38.262 , 40.1205,
        41.979 , 43.8375, 45.696 , 47.5545, 49.413 , 51.2715, 53.13  ]),
 <BarContainer object of 20 artists>)
```

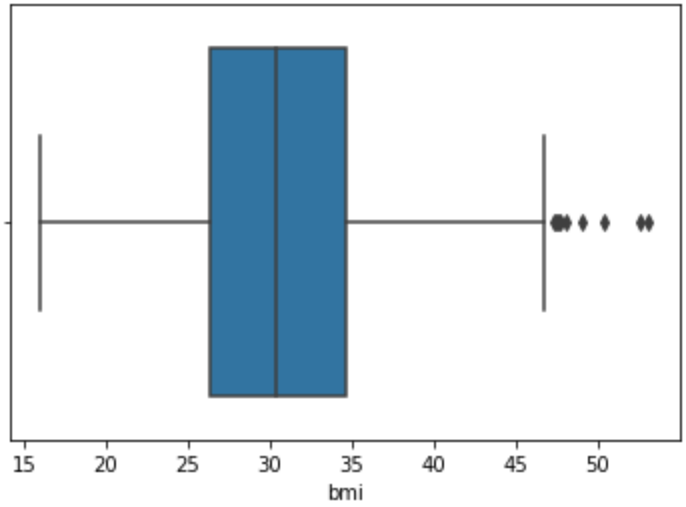


In [8]:
```
plt.hist(data.age,bins=20);
```



In [13]:
```
import seaborn as sns
sns.boxplot(data.bmi);
```

```
D:\Archana\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 b
e `data`, and passing other arguments without an explicit keyword will result in an error
or misinterpretation.
  warnings.warn(
```



In [ ]: