```
In [1]:   import pandas as pd
          import matplotlib.pyplot as plt
          import seaborn as sns
```

```
In [2]:   data = pd.read_excel(r"E:\Nareshit\3.November Data Science\1 nov-\stats - 1\2.Funda
```

```
In [3]:   data
```

Out[3]:

	Unnamed: 0	Graphs and tables for categorical variables	Unnamed: 2
0	NaN	German car shop	NaN
1	NaN	NaN	NaN
2	NaN	NaN	Frequency
3	NaN	Audi	124
4	NaN	BMW	98
5	NaN	Mercedes	113
6	NaN	Total	335

```
In [4]:   data.info()

          <class 'pandas.core.frame.DataFrame'>
          RangeIndex: 7 entries, 0 to 6
          Data columns (total 3 columns):
           #   Column                                        Non-Null Count  Dtype
          ---  ------                                        --------------  -----
           0   Unnamed: 0                                    0 non-null      float64
           1   Graphs and tables for categorical variables  5 non-null      object
           2   Unnamed: 2                                    5 non-null      object
          dtypes: float64(1), object(2)
          memory usage: 300.0+ bytes
```

```
In [5]:   data.columns
```

```
Out[5]:   Index(['Unnamed: 0', 'Graphs and tables for categorical variables',
                 'Unnamed: 2'],
                dtype='object')
```

```
In [19]:  data_clean = data.rename(columns = {'Unnamed: 0' : 'None', 'Graphs and tables for c
```

```
In [20]:  data
```

Out[20]:

	None	carbrand	frequency
0	NaN	German car shop	NaN
1	NaN	NaN	NaN
2	NaN	NaN	Frequency
3	NaN	Audi	124
4	NaN	BMW	98
5	NaN	Mercedes	113
6	NaN	Total	335

In [21]:
```python
categories = ['Audi','BMV','Mercedes']
categories
```
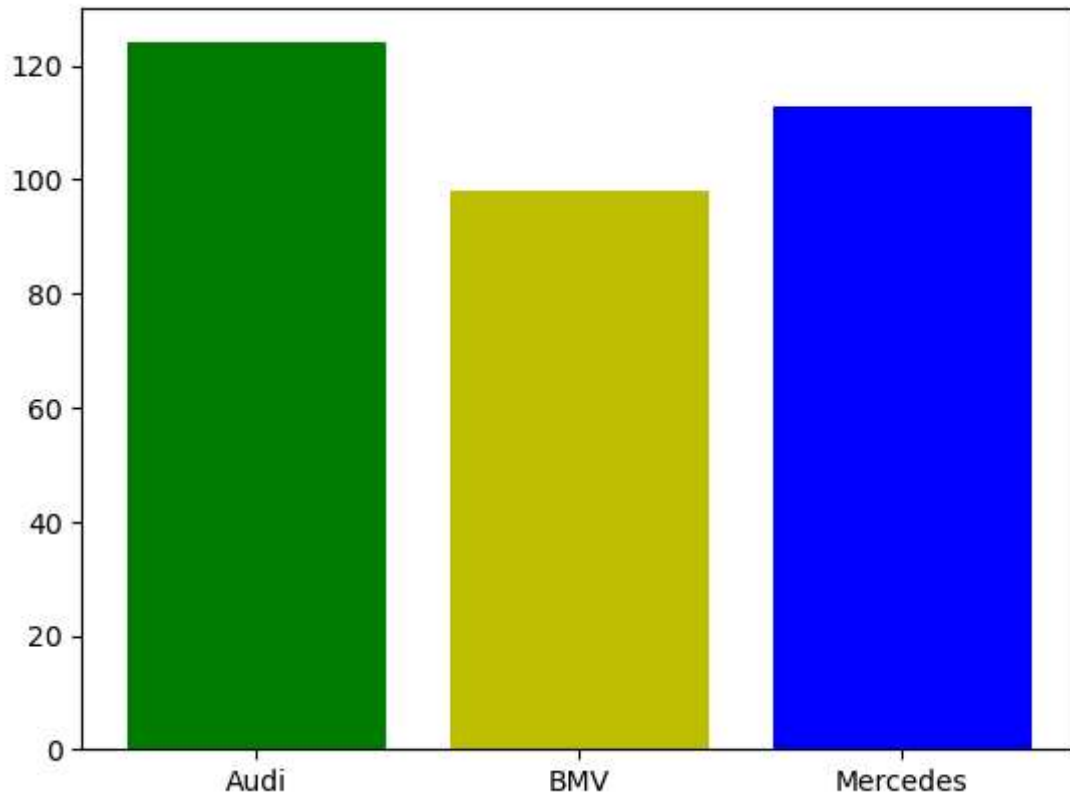
Out[21]: ['Audi', 'BMV', 'Mercedes']

In [22]:
```python
frequency = ['124','98','113']
```

In [23]:
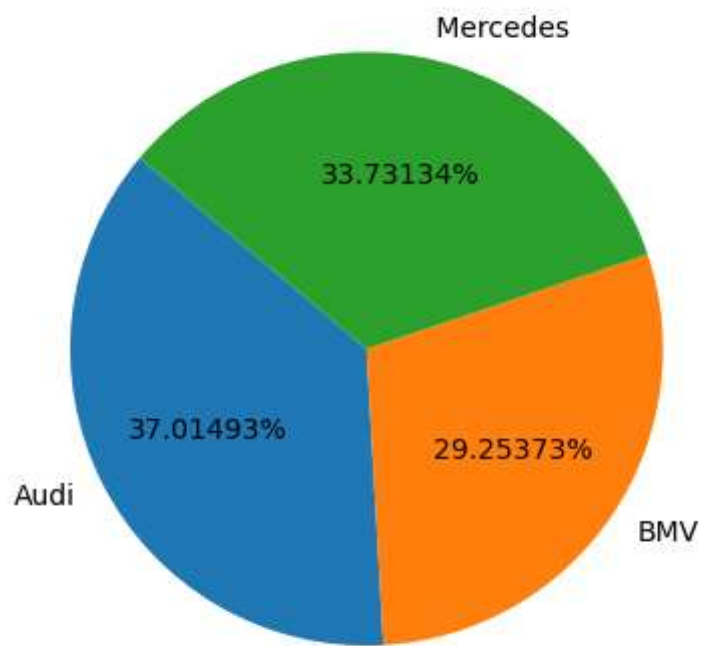```python
frequency
```

Out[23]: ['124', '98', '113']

In [ ]:

In [59]:
```python
#plt.figure(figsize=(8,6))
categories=['Audi', 'BMV', 'Mercedes']
frequency = [124, 98, 113]
colors = ('g','y','b')
plt.bar(categories, frequency, color=colors)
plt.show()
```

In [ ]:

In [63]:
```python
categories=['Audi','BMV',' Mercedes']
frequency = [124, 98, 113]

plt.pie(frequency, labels=categories, startangle=140, autopct='%1.5f%%')
plt.show()
```

In [ ]:

In [ ]: