

7) Write a Python program which explains uses of customizing seaborn plots with Aesthetic functions.

```
from pathlib import Path
Path.cwd()
```

Output: WindowsPath('C:/Users/GANESH/Downloads/Python/DVUP')

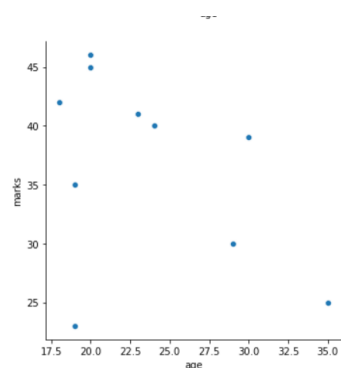
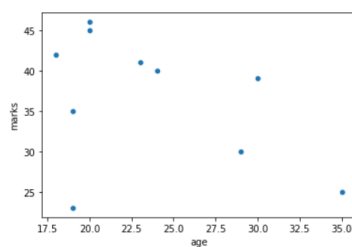
```
import seaborn as sns
import pandas as pd
data=pd.read_table('C:/Users/GANESH/Downloads/Python/DVUP/file.txt')
#data=pd.read_excel('dataset.xlsx')
data
```

```
Out[8]:
```

	name	marks	sex	age
0	A	45	M	20
1	B	23	F	19
2	C	46	F	20
3	D	35	M	19
4	E	42	F	18
5	F	41	M	23
6	G	40	F	24
7	H	25	M	35
8	I	30	F	29
9	J	39	M	30

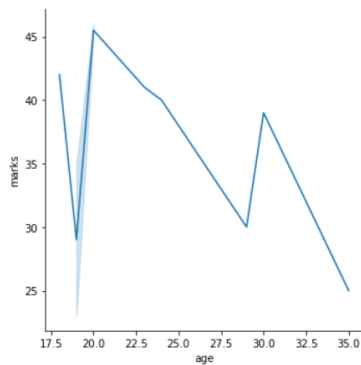
```
sns.scatterplot(data=data, x='age', y='marks')
sns.relplot(data=data, x='age', y='marks', kind='scatter')
```

output: <seaborn.axisgrid.FacetGrid at 0x14af0736670>

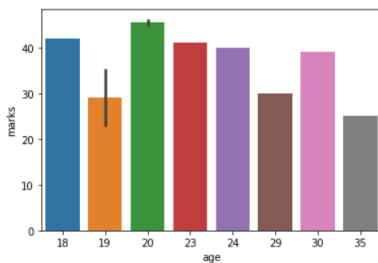


```
sns.relplot(kind='line', data=data, x='age', y='marks')
```

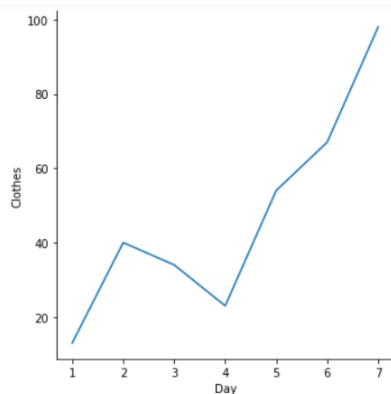
output: <seaborn.axisgrid.FacetGrid at 0x25b98a7be50>



```
sns.barplot(x='age', y='marks', data=data)
plt.show()
```



```
a=pd.DataFrame({'Day':[1,2,3,4,5,6,7],
                'Grocery':[30,80,45,23,51,46,76],
                'Clothes':[13,40,34,23,54,67,98],
                'Utensils':[12,32,27,56,87,54,34]}
                ,index=[1,2,3,4,5,6,7])
g = sns.relplot(x="Day", y="Clothes", kind="line", data=a)
```



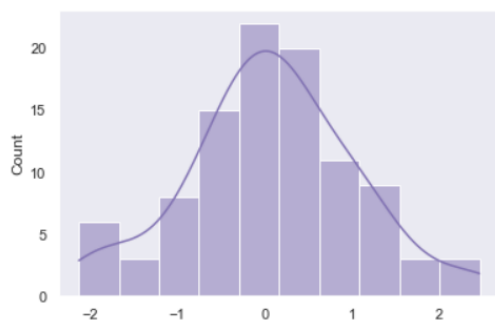
```
import numpy as np
import seaborn as sns

sns.set(style="dark") # white, dark, ticks

# Generate a random univariate dataset
rs = np.random.RandomState(10)
d = rs.normal(size=100)

# Plot a simple histogram and kde
sns.histplot(d, kde=True, color="m")

output: <AxesSubplot:ylabel='Count'>
```



Colormaps are used to visualize plots effectively and easily. One might use different sorts of colormaps for different kinds of plots. `color_palette()` method is used to give colors to the plot.

```
import seaborn as sns
import matplotlib.pyplot as plt
palette = sns.color_palette()
sns.palplot(palette)
plt.show()
```



```
import seaborn as sns
import matplotlib.pyplot as plt
palette = sns.color_palette('Greens', 5)
sns.palplot(palette)
plt.show()
```

