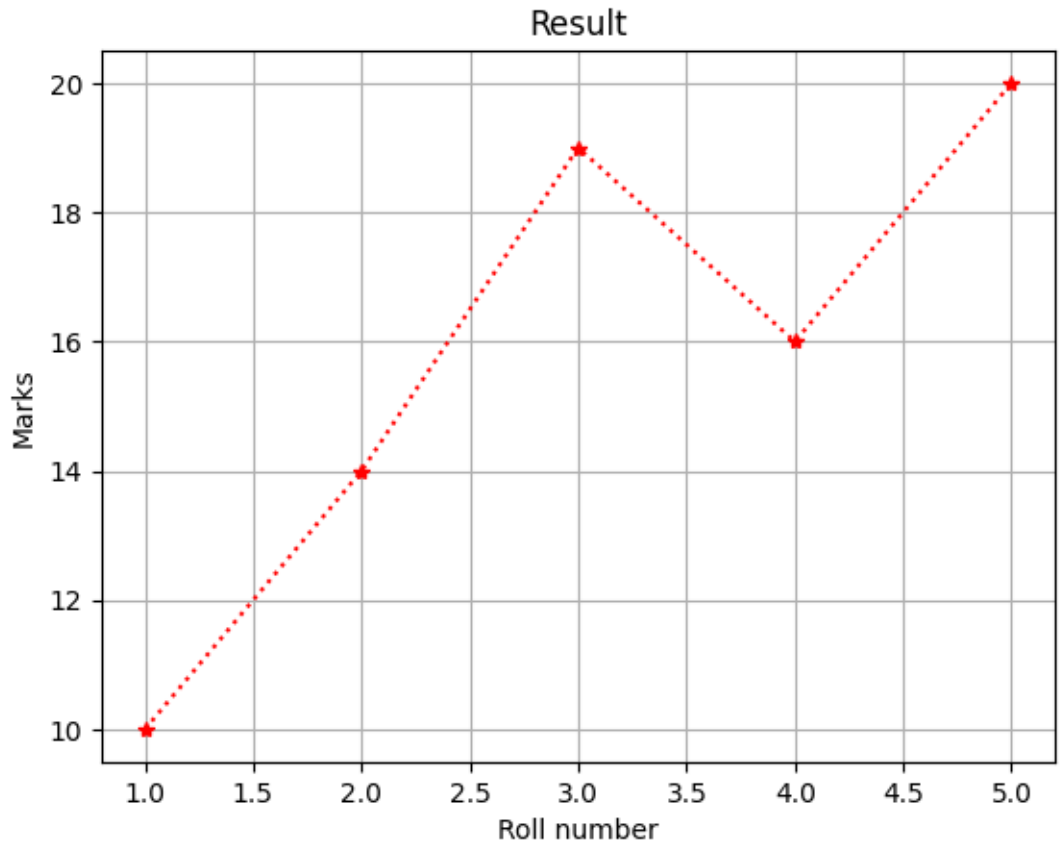
Name : Yasmeen Fatima

Roll no : 569

PRN no : 202201030020

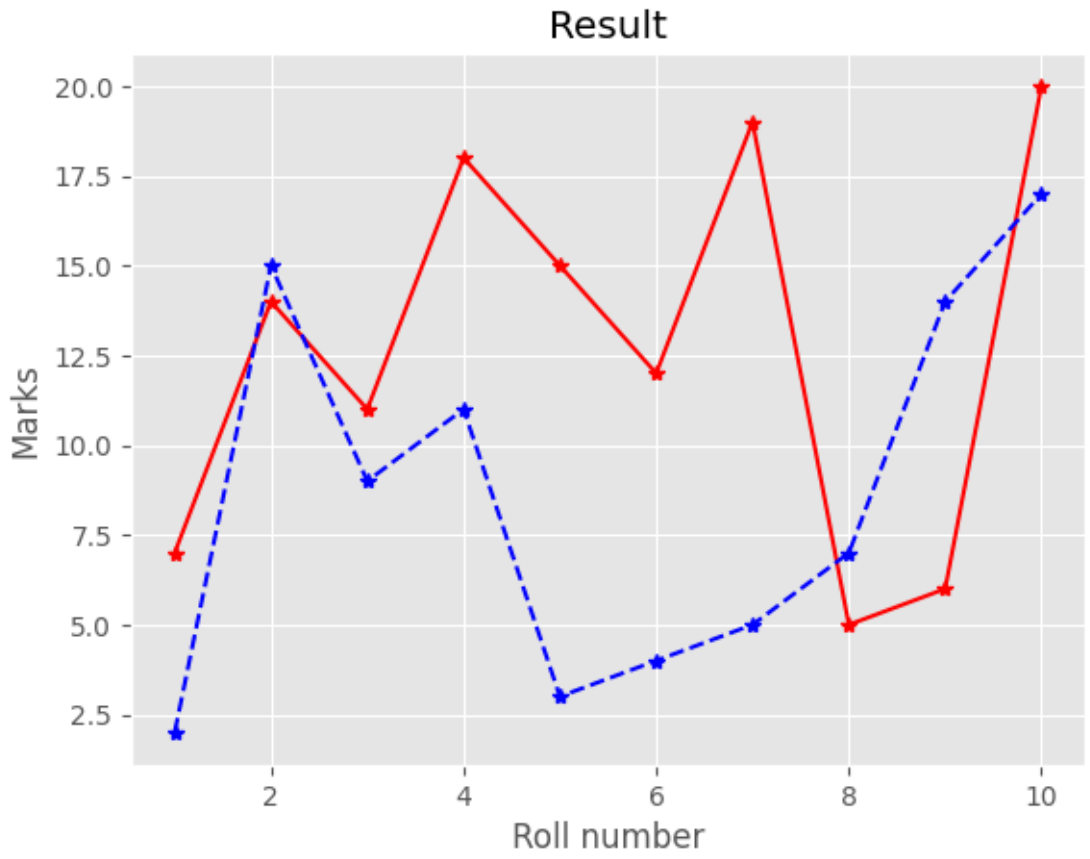
```
from matplotlib import pyplot as plt
```

```
x=[1,2,3,4,5]
y=[10,14,19,16,20]
plt.plot(x,y,"*",color="red",linestyle=":")
plt.title("Result")
plt.xlabel("Roll number")
plt.ylabel("Marks")
plt.style.use("ggplot")
plt.grid()
plt.show()
```




```
roll_no=[1,2,3,4,5,6,7,8,9,10]
E_div=[7,14,11,18,15,12,19,5,6,20]
```

```
A_div=[2,15,9,11,3,4,5,7,14,17]
plt.plot(roll_no,E_div,"*",color="red",linestyle="sol
id")
plt.plot(roll_no,A_div,"*",color="blue",linestyle="da
shed")
plt.title("Result")
plt.xlabel("Roll number")
plt.ylabel("Marks")
plt.show()
```

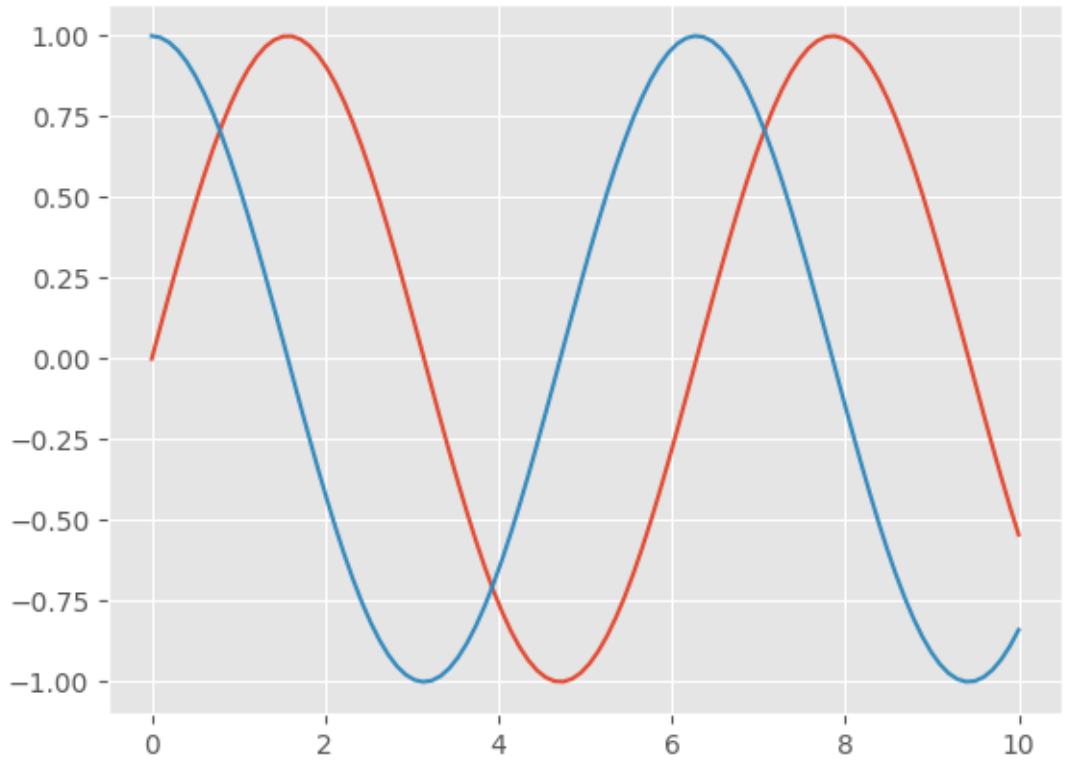



```
import numpy as np
```

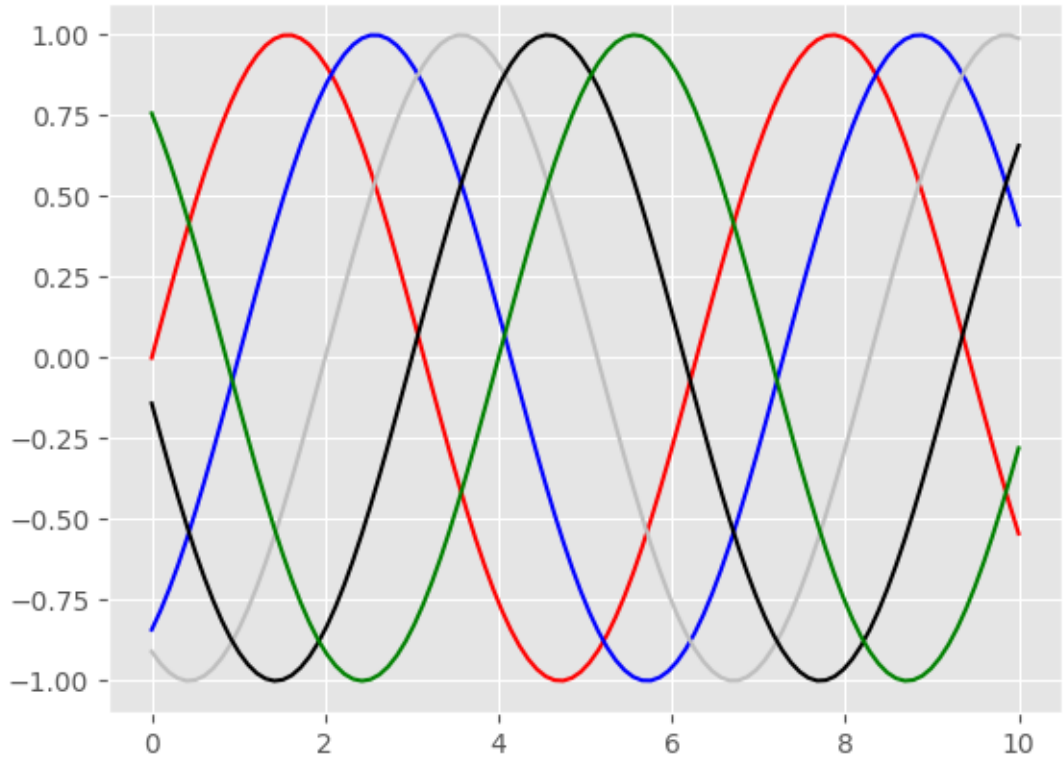
```
from matplotlib import style
from matplotlib import pyplot as plt
```

```
x=np.linspace(0,10,100)
fig=plt.figure()
```

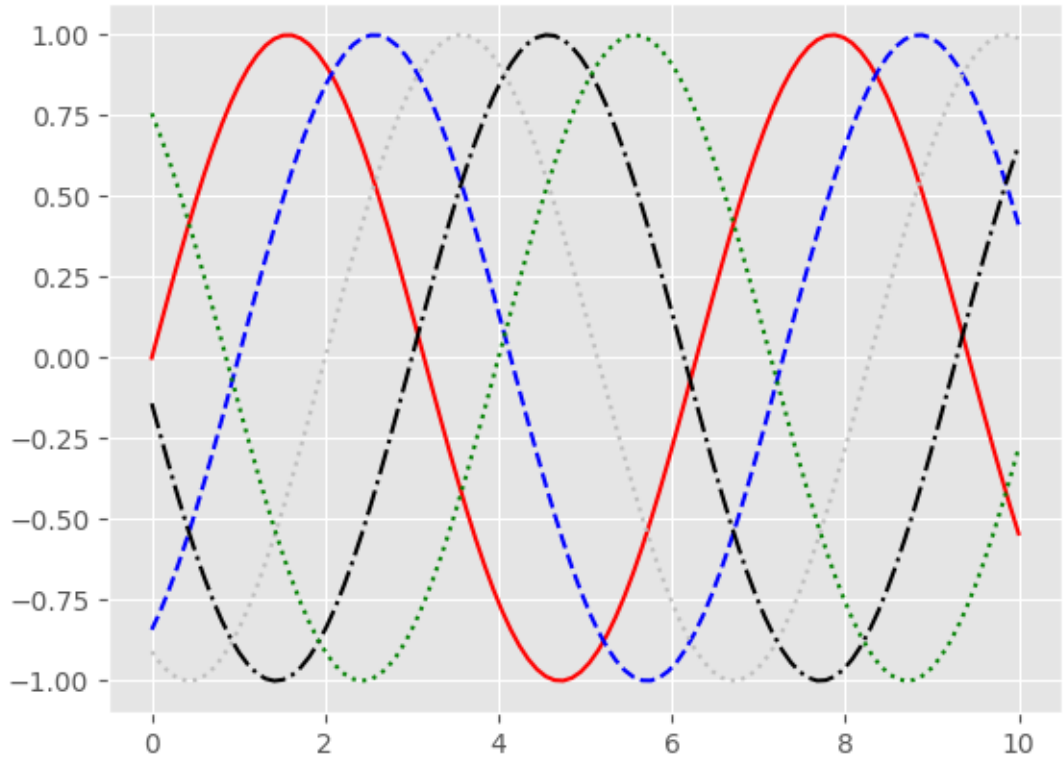
```
plt.plot(x,np.sin(x))
plt.plot(x,np.cos(x))
plt.show()
```




```
plt.plot(x,np.sin(x-0),color="red")
plt.plot(x,np.sin(x-1),color="blue")
plt.plot(x,np.sin(x-2),color="0.75")
plt.plot(x,np.sin(x-3),color="black")
plt.plot(x,np.sin(x-4),color="g")
```

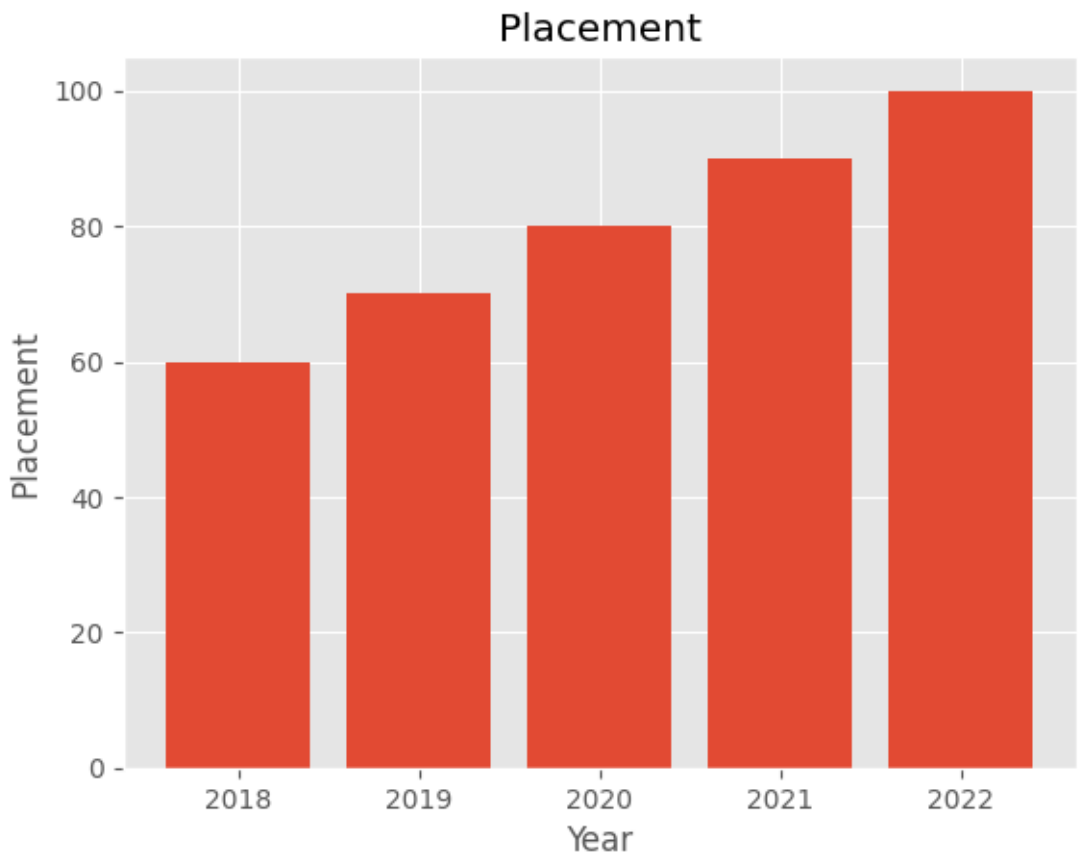



```
plt.plot(x,np.sin(x-0),color="red",linestyle="solid")
plt.plot(x,np.sin(x-
1),color="blue",linestyle="dashed")
plt.plot(x,np.sin(x-
2),color="0.75",linestyle="dotted")
plt.plot(x,np.sin(x-
3),color="black",linestyle="dashdot")
plt.plot(x,np.sin(x-4),color="g",linestyle="dotted")
```

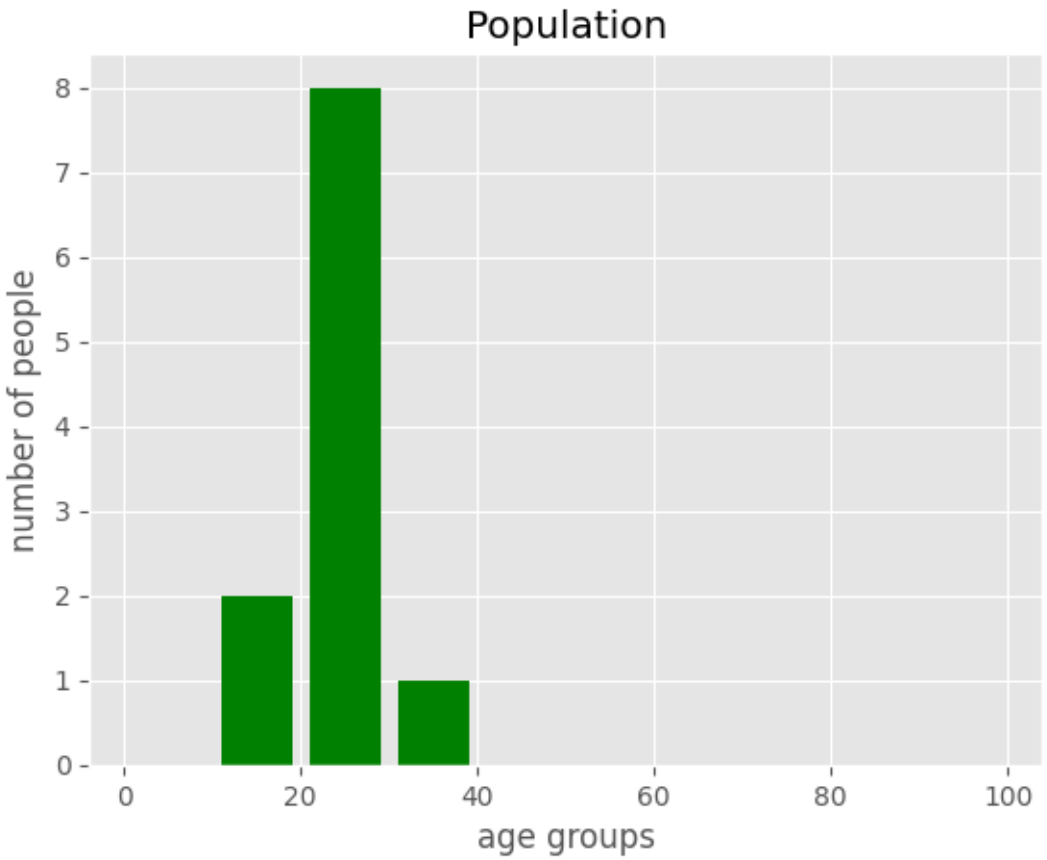



```
import matplotlib.pyplot as plt
```

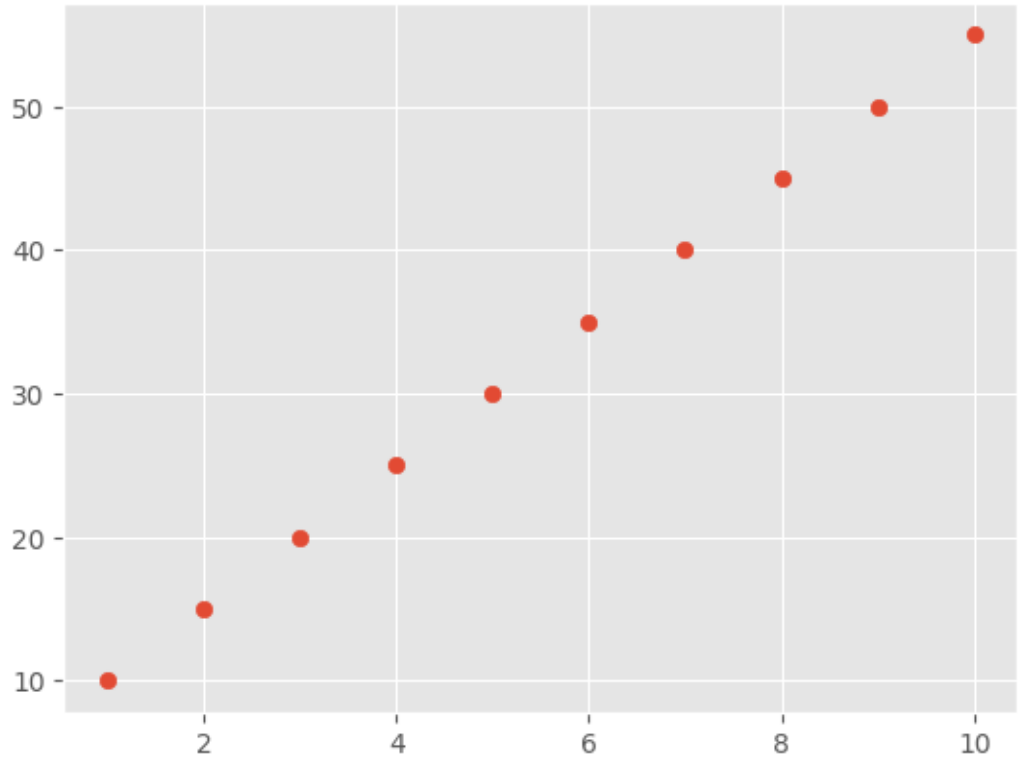
```
year=[2018,2019,2020,2021,2022]
placement=[60,70,80,90,100]
plt.bar(year,placement)
plt.title("Placement")
plt.xlabel("Year")
plt.ylabel("Placement")
plt.show()
```



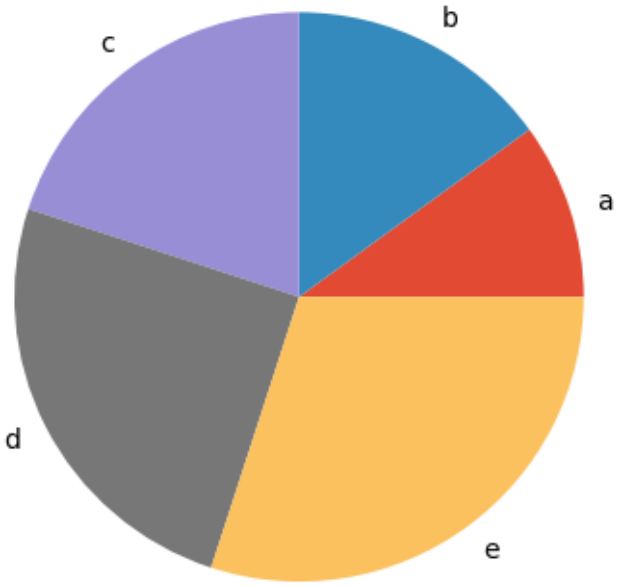

```
population_age=[18,19,20,21,24,25,26,27,28,29,30]
bins=[0,10,20,30,40,50,60,70,80,90,100,]
plt.hist(population_age,bins,rwidth=0.8,color="green"
)
plt.title("Population")
plt.ylabel("number of people")
plt.xlabel("age groups")
plt.show()
```




```
x=[1,2,3,4,5,6,7,8,9,10]
y=[10,15,20,25,30,35,40,45,50,55]
plt.scatter(x,y)
```




```
y=np.array([10,15,20,25,30])
mylabels=["a","b","c","d","e"]
plt.pie(y,labels=mylabels)
plt.show()
```




```
import pandas as pd
import numpy as np


data=pd.read_csv("/content/grainsales.csv")
print(data)
```

```
GrainName         State        City Months   Year
Sales
0          Ragi   Maharashtra      Nagpur     JAN   2023
1000000
1         Bajra        Panjab   Amritsar     FEB   2023
1500000
2          Ragi   Maharashtra      Nagpur     JAN   2023
1000000
3         Bajra        Panjab   Amritsar     FEB   2023
1500000
4          Ragi   Maharashtra      Nagpur     JAN   2023
1000000
5         Bajra        Panjab   Amritsar     FEB   2023
1500000
6          Oats      Hariyana   Gurugram   MARCH   2023
2000000
7        Sattu        Gujarat      Surat   APRIL   2023
2500000
```

```
8         Sooji   Tamil Nadu    Madurai    MAY  2023
3000000
9   Brown rice     Telangana  Hyderabad   JUNE  2023
3500000
10        Wheat  West Bengol   Asansole   JULY  2023
4000000
11         Corn           UP     Kanpur    AUG  2023
4500000
12         Ragi  Maharashtra     Nagpur    JAN  2023
1000000
13        Bajra       Panjab   Amritsar    FEB  2023
1500000
14         Oats     Hariyana   Gurugram  MARCH  2023
2000000
15       Sattu       Gujarat      Surat  APRIL  2023
2500000
16        Sooji   Tamil Nadu    Madurai    MAY  2023
3000000
17  Brown rice     Telangana  Hyderabad   JUNE  2023
3500000
18        Wheat  West Bengol   Asansole   JULY  2023
4000000
19         Corn           UP     Kanpur    AUG  2023
4500000
20        Sooji   Tamil Nadu    Madurai    MAY  2023
3000000
21  Brown rice     Telangana  Hyderabad   JUNE  2023
3500000
22        Wheat  West Bengol   Asansole   JULY  2023
4000000
23         Corn           UP     Kanpur    AUG  2023
4500000
24         Ragi  Maharashtra     Nagpur    JAN  2023  1000000
25  Brown rice     Telangana  Hyderabad   JUNE  2023  3500000
26        Wheat  West Bengol   Asansole   JULY  2023  4000000
```

```
data.head(5)
```

	GrainName	State	City	Months	Year	Sales
0	Ragi	Maharashtra	Nagpur	JAN	2023	1000000

GrainName	State	City	Months	Year	Sales	
1	Bajra	Panjab	Amritsar	FEB	2023	1500000
2	Ragi	Maharashtra	Nagpur	JAN	2023	1000000
3	Bajra	Panjab	Amritsar	FEB	2023	1500000
4	Ragi	Maharashtra	Nagpur	JAN	2023	1000