

```
y =  
sin(x)  
??  
y =  
sin(x)  
plot([x],  
y,  
[fmt],  
**kwargs)
```

```
??
```

```

??
??
m'inus'] =
False
??
m'inus'] =
False
rate =
[9.4, 10.6, 9.6, 7.9, 7.8, 7.3, 6.9, 6.7, 6.8, 6.6] first_i ndustry_rate =
[4.0, 4.3, 4.2, 4.50, 3.8, 4.1, 3.9, 3.3, 4.0, 3.5] second_i ndustry_rate =
[10.3, 12.7, 10.7, 8.4, 8.0, 7.4, 6.2, 6.3, 5.9, 5.8] third_i ndustry_rate =
[9.6, 9.7, 9.5, 8.0, 8.3, 7.8, 8.2, 7.7, 7.9, 7.6] years =
[2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018]
rate, ' .-' , label = '
GDP') plt.plot(years, first_i ndustry_rate, ' .-' , label = '
') plt.plot(years, second_i ndustry_rate, ' .-' , label = '
') plt.plot(years, third_i ndustry_rate, ' .-' , label = '
')
??
?
y
(x_i, y_i)
1
scat-
ter(x,
y,
[s],
[c],
**kwargs)

??
m'inus'] =
False
??
m'inus'] =
False

```

```

bar(x,
height,
[width],
**kwargs)

```

```

 $m_{inus}'$ ] =
False
 $n_{umber}$  =
[6, 7, 6, 1, 2]
 $n_{umber}$ )plt.title("")
bar(x,
width,
[height],
**kwargs)

```

```

 $m_{inus}'$ ] =
False
 $n_{umber}$  =
[6, 7, 6, 1, 2]
 $n_{umber}$ )barhplt.title("")
 $m_{inus}'$ ] =
False
 $n_{umber}_{male}$  =
[6, 7, 6, 1, 2]buy $n_{umber}_{female}$  =
[9, 4, 4, 5, 6]
 $w_{idth}$  =
0.3index $m_{ale}$  =
np.arange(len(waters))index $f_{emale}$  =
index $m_{ale}$ +
bar $w_{idth}$ 
 $m_{ale}$ , height =
buy $n_{umber}_{male}$ , width =
bar $w_{idth}$ , color = '
b', label = '
')plt.bar(index $f_{emale}$ , height =
buy $n_{umber}_{female}$ , width =
bar $w_{idth}$ , color = '
g', label = '
')
 $m_{ale}$ +
bar $w_{idth}/2$ , waters)watersindex $m_{ale}$ +
bar $w_{idth}/2$ plt.ylabel("")plt.title("")
??

```

```
[n,  
bins,  
patches]  
hist(x,  
[bins],  
**kwargs)  
⋮
```

```
??  
bar(x,  
[ex-  
pode],  
[la-  
bels],  
[au-  
topic],  
**kwargs)
```

```
minus'] =  
False  
minus'] =  
False
```