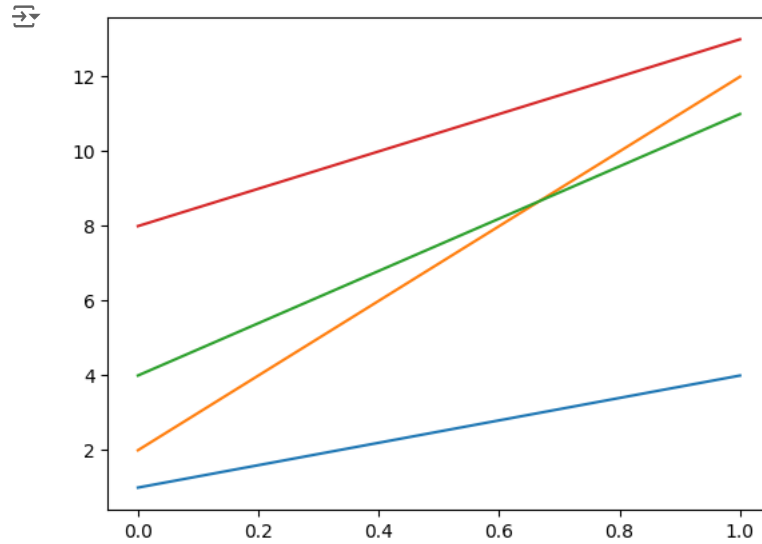


```
import numpy as np
import matplotlib.pyplot
a=np.array([[1,2,4,8],[4,12,11,13]])
print(a)
```

```
[[ 1  2  4  8]
 [ 4 12 11 13]]
```

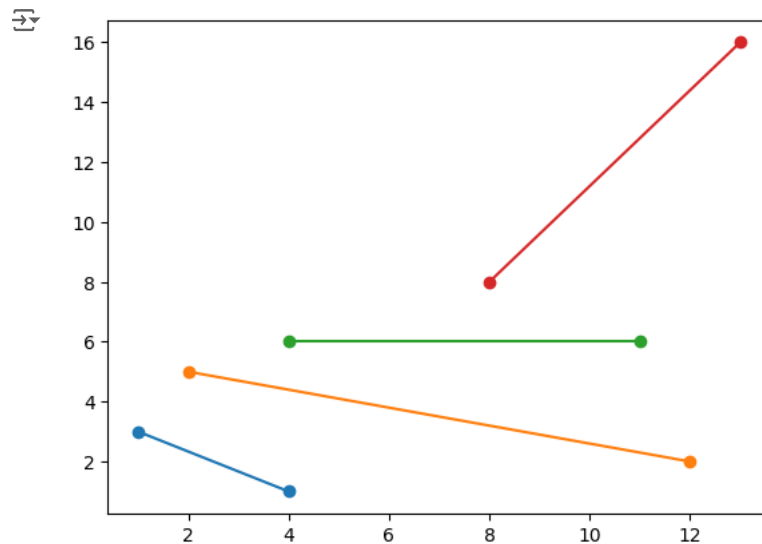
```
import matplotlib.pyplot as pl
pl.plot(a)
pl.show()
```



```
b=np.array([[3,5,6,8],[1,2,6,16]])
print(b)
print(a)
```

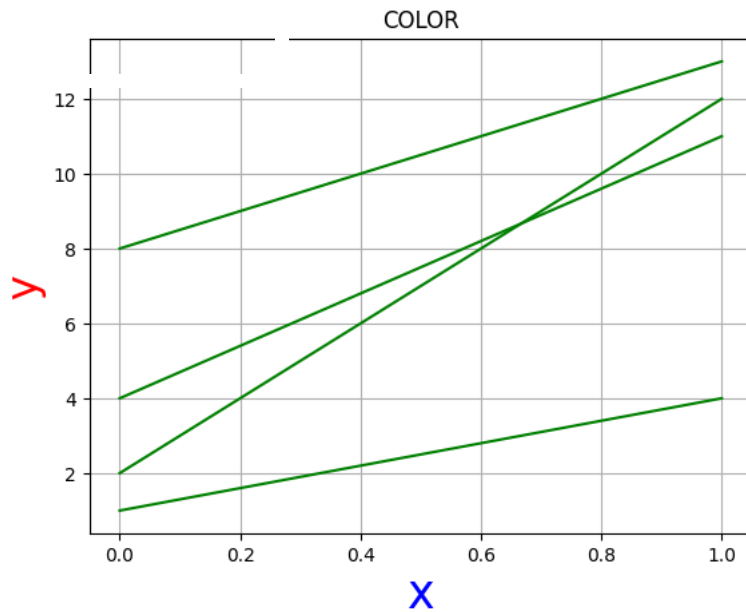
```
[[ 3  5  6  8]
 [ 1  2  6 16]]
[[ 1  2  4  8]
 [ 4 12 11 13]]
```

```
pl.plot(a,b,marker='o')
pl.show()
```

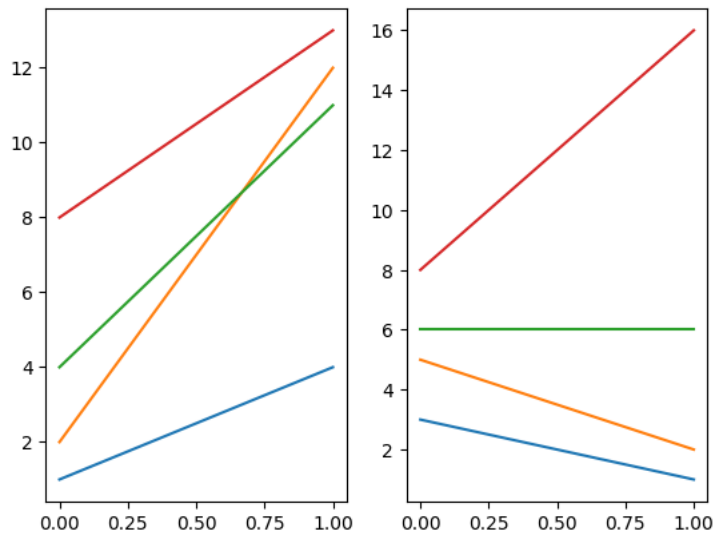


```
pl.plot(a,color='g')
pl.xlabel("x",color='b',size='25')
pl.ylabel("y",color='r',size='23')
```

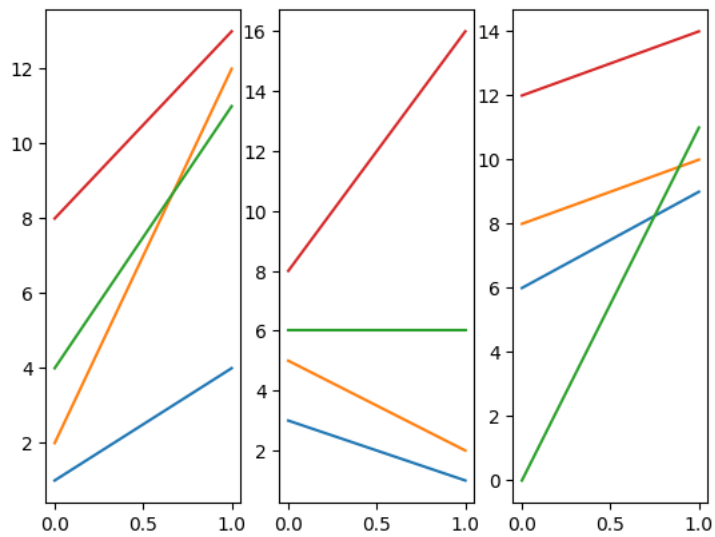
```
p1.title("COLOR")
p1.grid()
```



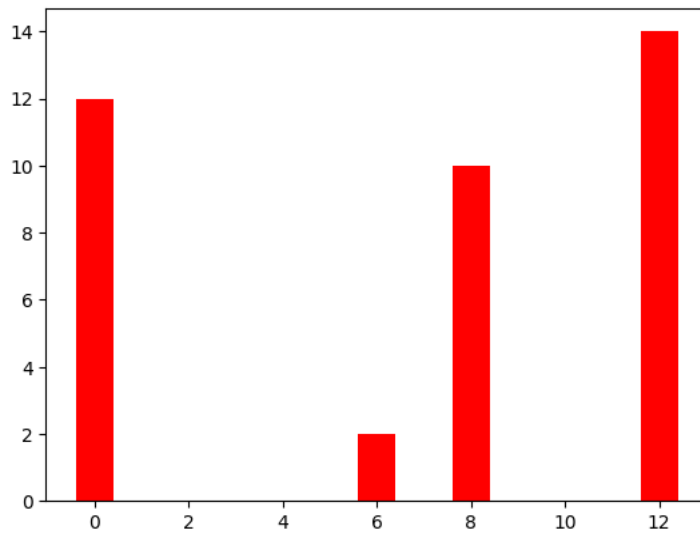
```
p1.subplot(1,2,1)
p1.plot(a)
p1.subplot(1,2,2)
p1.plot(b)
p1.show()
```



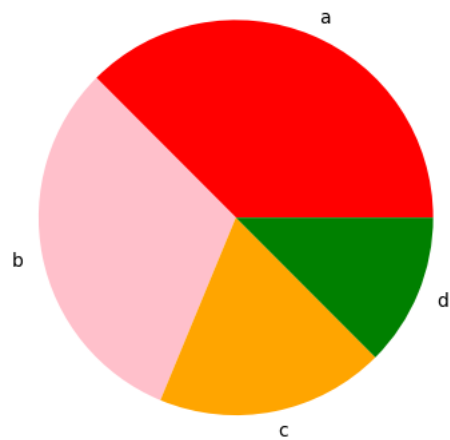
```
c=np.array([[6,8,0,12],[9,10,11,14]])
p1.subplot(1,3,1)
p1.plot(a)
p1.subplot(1,3,2)
p1.plot(b)
p1.subplot(1,3,3)
p1.plot(c)
p1.show()
```



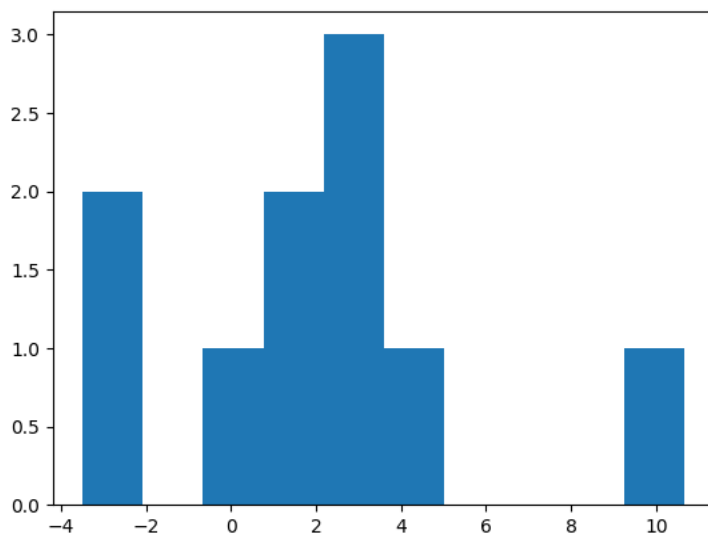
```
d=np.array([6,8,0,12])
e=np.array([2,10,12,14])
p1.bar(d,e,color='r')
p1.show()
```



```
import numpy as np
import matplotlib.pyplot
import matplotlib.pyplot as p1
d=np.array([12,10,6,4])
e=np.array([2,10,12,14])
sb=['a','b','c','d']
cl=['red','pink','orange','green']
p1.pie(d,labels= sb,colors= cl)
p1.show()
```



```
a=np.random.normal(3,5,10)
pl.hist(a)
pl.show()
```



```
x=open('eee.txt','w')
x.write("I AM INEVITABLE")
x.close()
x=open('eee.txt','r')
print(x.read())
x.close()
```



I AM INEVITABLE

```
x=open('eee.txt','a')
x.write("\nIRON MAN!!!!")
x.close()
x=open('eee.txt','r')
print(x.read())
x.close()
```



I AM INEVITABLE  
IRON MAN!!!!

```
import json
x={'Name':"NAMITHA", "Age":20, "city":"Chennai"}
y=json.loads(x)
```

