visualizing distribution of the data

.distplot() .kdeplot() .jointplot()

In [11]:

```
import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
%matplotlib inline
from numpy.random import randn

import warnings
warnings.filterwarnings('ignore')
```

In [7]:

```
x =randn(1000)
```

In [8]:

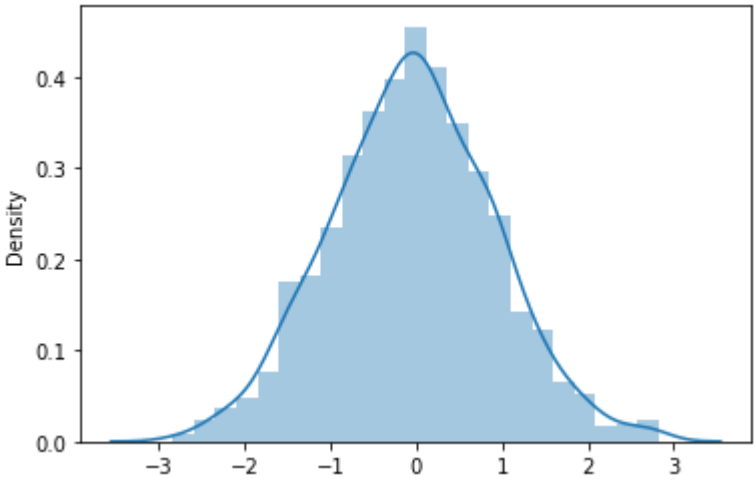
```
x
```

Out[8]:

```
array([-3.42747609e-01,  5.91469201e-02, -1.45847412e+00, -1.10314664e+00,
        8.77881508e-02, -9.09197831e-01,  3.26326921e-01,  3.24535360e-01,
       -1.75842501e+00, -1.12076773e+00,  8.06170287e-01, -9.23543276e-01,
        3.53821913e-01,  1.18181471e+00, -1.90699551e-01,  9.77672194e-01,
        3.80184821e-01,  8.42893905e-01, -4.83539569e-01, -8.17606485e-01,
        6.37417187e-01, -5.46669648e-01, -1.27097743e+00, -1.07156565e+00,
        2.52756471e+00,  1.15109215e+00, -5.37054410e-01, -5.39195480e-01,
       -1.48452127e+00,  5.02376145e-01,  4.86347680e-01, -1.16603696e+00,
        7.62571116e-01, -1.18565888e+00,  7.13475048e-01,  6.81054898e-01,
       -6.67415523e-01,  2.15297672e+00,  2.72043968e+00, -1.89923773e+00,
       -6.26249229e-01,  1.67229587e+00,  3.49395067e-01, -8.86527146e-01,
       -7.77414463e-01,  4.80190868e-01, -1.07004451e-01, -1.37650316e+00,
        2.82098886e-02, -1.04609942e+00, -1.86138801e+00, -8.86956748e-01,
        7.42477528e-01, -9.55009425e-01,  6.01186557e-01,  1.90628363e+00,
       -9.29409139e-01,  1.78925930e+00,  1.21339235e-01, -9.58609069e-01,
       -2.22684935e+00, -5.65608417e-02,  6.68716730e-01,  9.71279395e-04,
        2.28549266e-01, -1.85686987e+00,  1.32567040e+00, -8.39203396e-02,
       -3.38617433e-01,  5.03100618e-01,  1.47617042e+00, -1.18802990e+00,
```

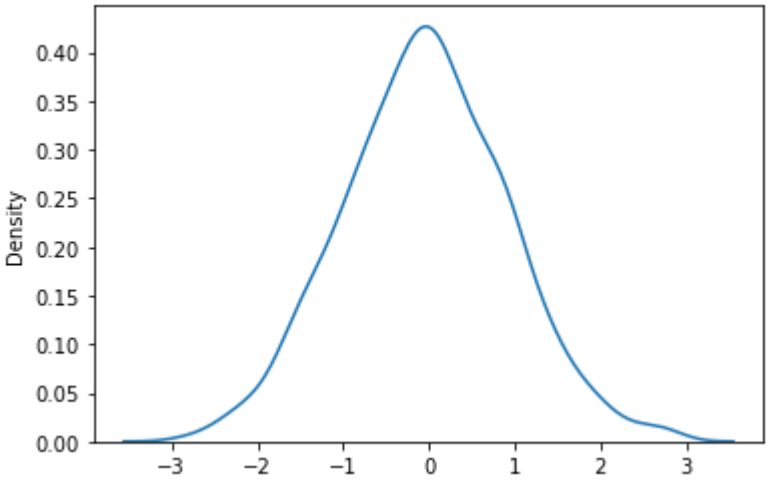
In [12]:

```
sns.distplot(x,kde=True,hist=True)
plt.show()                                          # normal distribution curve
```



In [14]:

```
sns.kdeplot(x, shade=False)
plt.show()
```



In [15]:

```
tips=sns.load_dataset('tips')
tips.tail()
```

Out[15]:

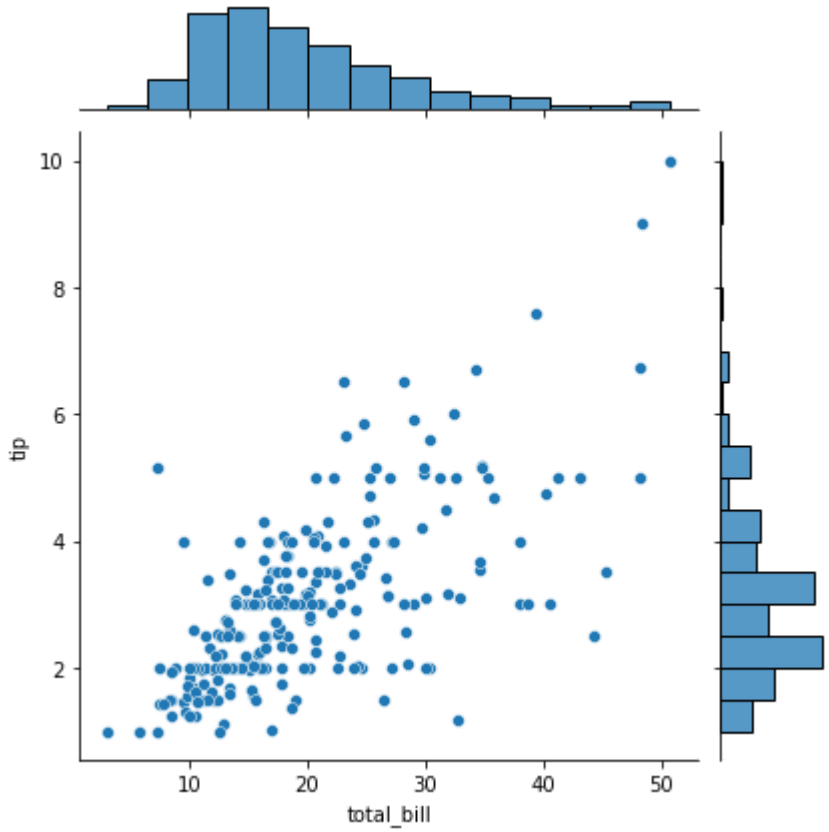
	total_bill	tip	sex	smoker	day	time	size
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	17.82	1.75	Male	No	Sat	Dinner	2
243	18.78	3.00	Female	No	Thur	Dinner	2

In [16]:

```
x=tips['total_bill']
y=tips['tip']
```

In [18]:

```
sns.jointplot(x=x,y=y)
plt.show()
```



In [ ]: