```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

df1 = pd.DataFrame()
df1["n"] = np.array([i for i in range(1,11,1)])
df1["x"] = np.array([i**2 for i in range(1,11,1)])

df2 = pd.DataFrame()
df2["n"] = np.array([i for i in range(1,6,1)])
df2["y"] = np.array([i for i in range(1,6,1)])

df1.mean()
```

```
n     5.5
x    38.5
dtype: float64
```

```
df2.mean()
```

```
n    3.0
y    3.0
dtype: float64
```

```
K = pd.merge(df1, df2, how = "left", on = ["n"])
K.head(4)
```

```
   n   x    y
0  1   1  1.0
1  2   4  2.0
2  3   9  3.0
3  4  16  4.0
```

```
K.mean()
```

```
n     5.5
x    38.5
y     3.0
dtype: float64
```

```
K.y.mean()
```

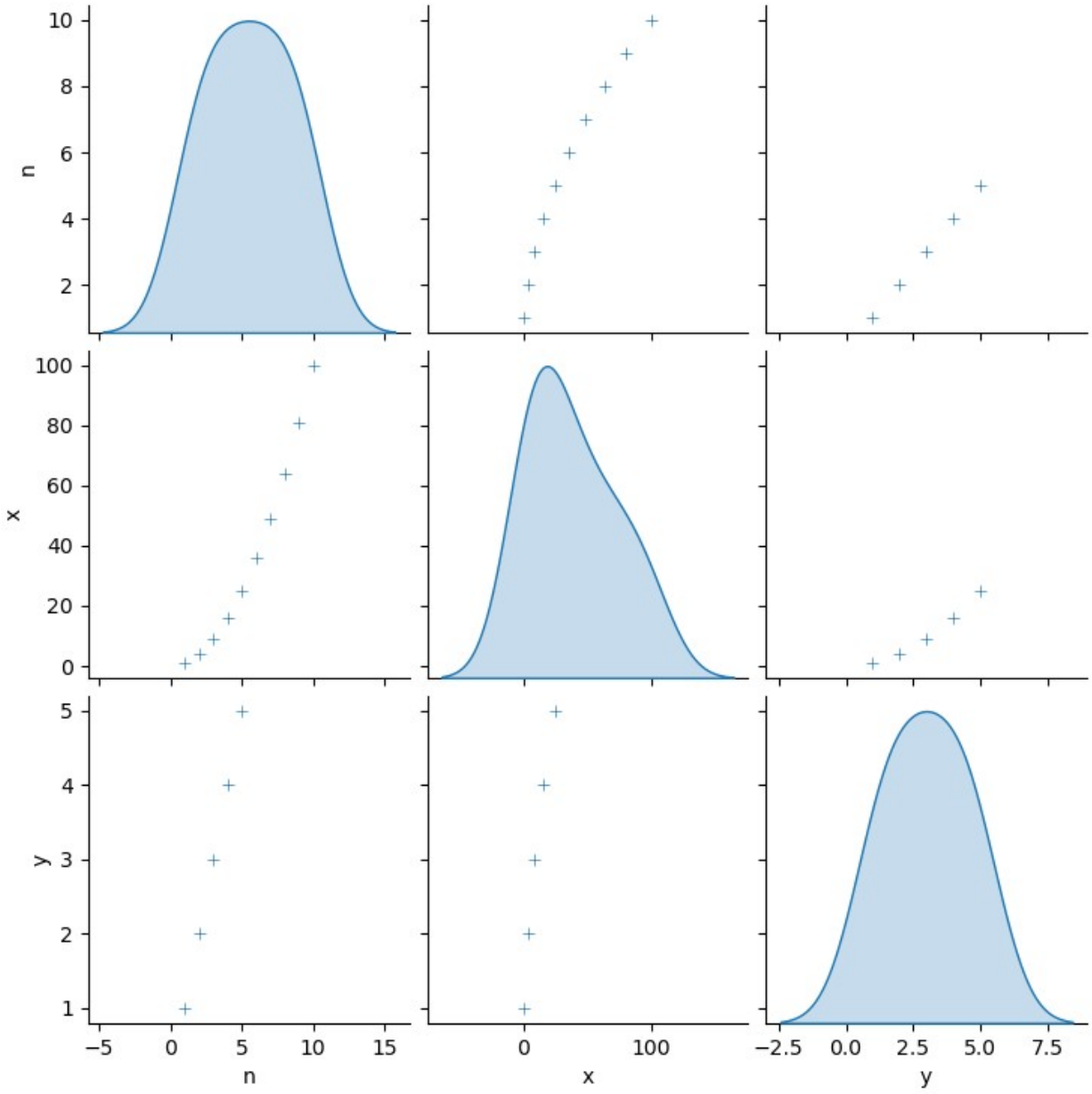
```
3.0
```

```
K.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 10 entries, 0 to 9
Data columns (total 3 columns):
 #   Column  Non-Null Count  Dtype
---  ------  --------------  -----
```

```
 0   n       10 non-null     int32
 1   x       10 non-null     int32
 2   y       5 non-null      float64
dtypes: float64(1), int32(2)
memory usage: 240.0 bytes
```

```
sns.pairplot(K, diag_kind = "kde", markers = "+")
plt.show()
```




```
K.isna()
```

```
       n      x      y
0  False  False  False
1  False  False  False
2  False  False  False
3  False  False  False
4  False  False  False
5  False  False   True
6  False  False   True
7  False  False   True
8  False  False   True
9  False  False   True
```

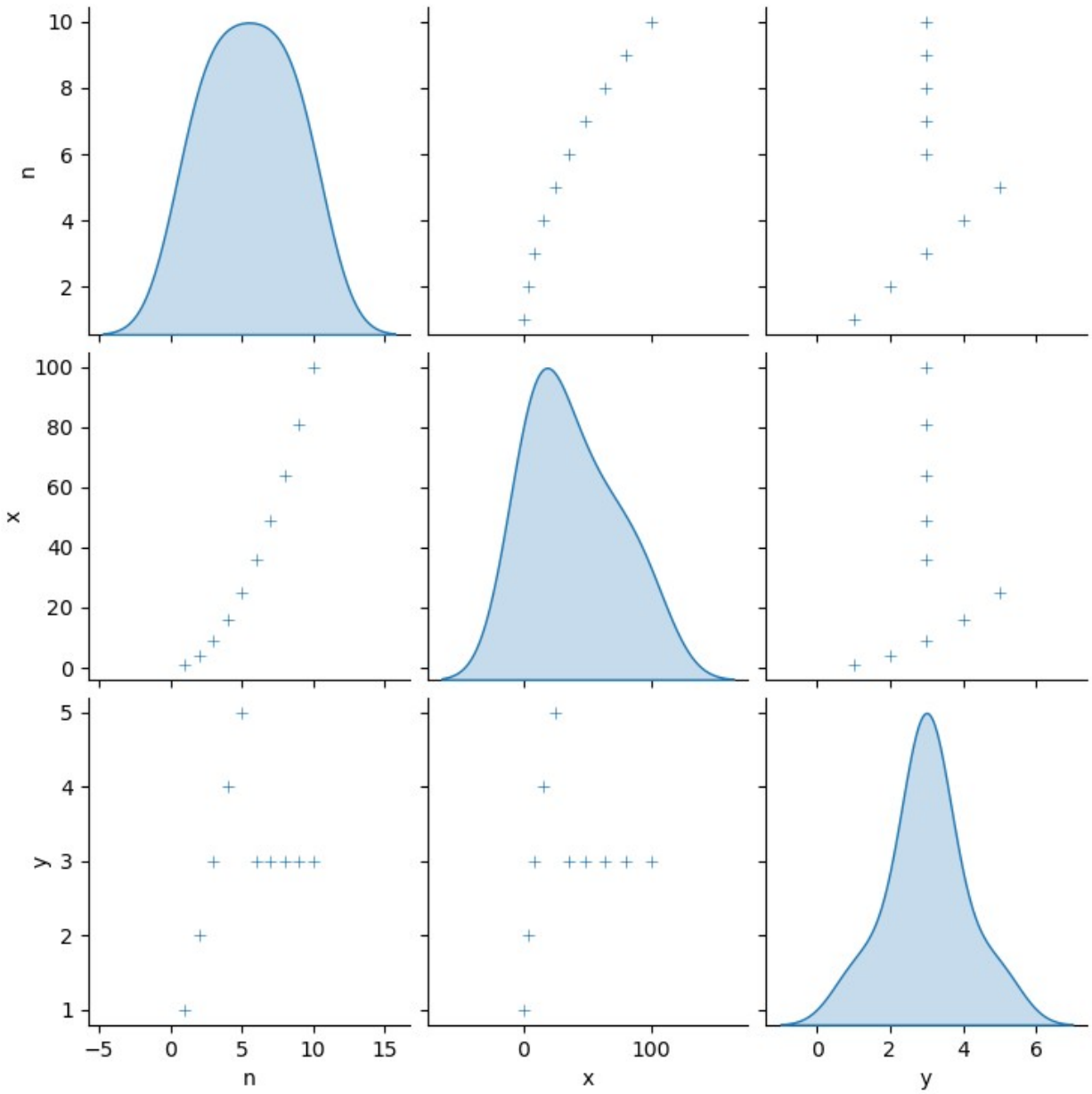
```
K.isna().sum()
```

```
n    0
x    0
y    5
dtype: int64
```

```
K["y"] = K["y"].fillna(K["y"].mean())
K
```

```
    n    x    y
0   1    1  1.0
1   2    4  2.0
2   3    9  3.0
3   4   16  4.0
4   5   25  5.0
5   6   36  3.0
6   7   49  3.0
7   8   64  3.0
8   9   81  3.0
9  10  100  3.0
```

```
sns.pairplot(K, diag_kind = "kde", markers = "+")
plt.show()
```




```
sns.distplot(K, kde = True)
```

```
<AxesSubplot:ylabel='Density'>
```

```
K.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 10 entries, 0 to 9
Data columns (total 3 columns):
 #   Column  Non-Null Count  Dtype
---  ------  --------------  -----
 0   n       10 non-null     int32
 1   x       10 non-null     int32
```

```
 2   y       10 non-null     float64
dtypes: float64(1), int32(2)
memory usage: 540.0 bytes

K.mean()

n     5.5
x    38.5
y     3.0
dtype: float64
```