In [1]:

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

In [2]:

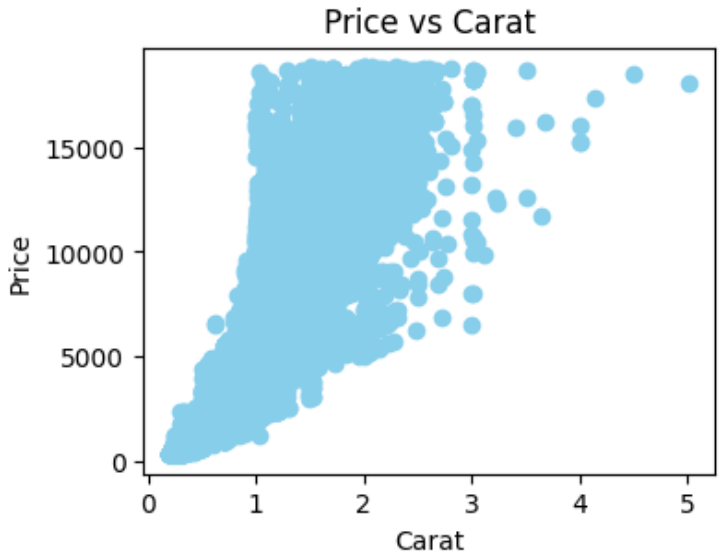
```
data = pd.read_csv('D:\Code\Python\Dataset\diamonds.csv')
```

In [3]:

```
plt.rcParams['figure.figsize'] = (4, 3)
```

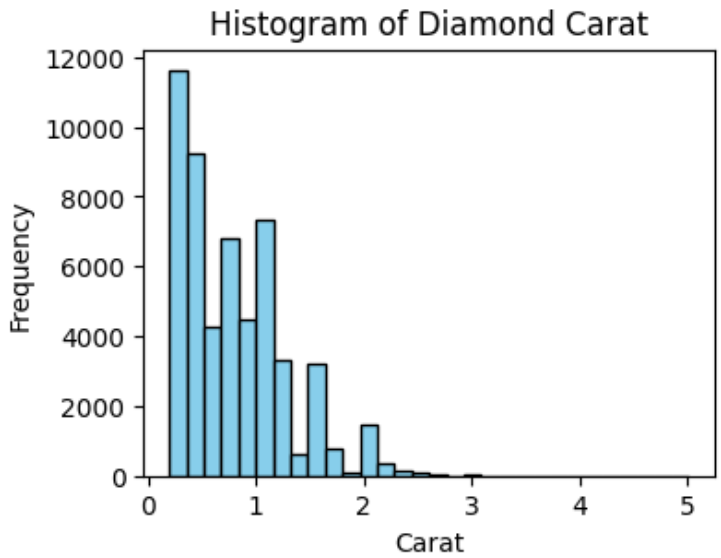
In [4]:

```
plt.scatter(data['carat'], data['price'], color='skyblue')
plt.xlabel('Carat')
plt.ylabel('Price')
plt.title('Price vs Carat')
plt.show()
```



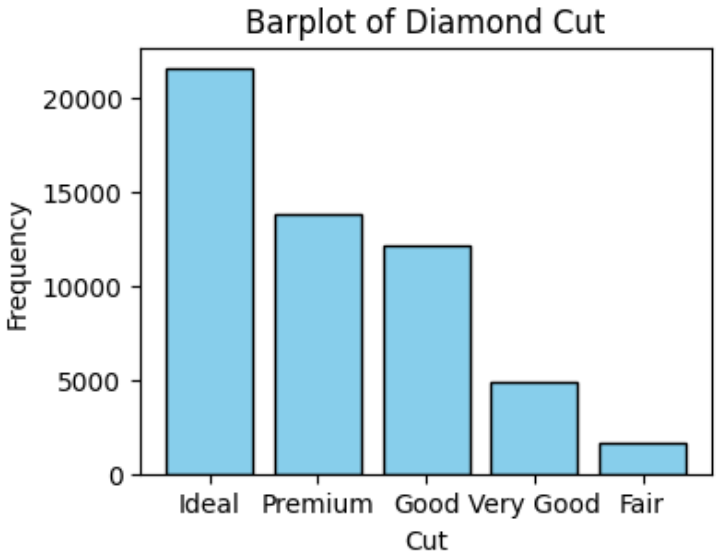
In [5]:

```
plt.hist(data['carat'], bins=30, color='skyblue', edgecolor='black')
plt.title('Histogram of Diamond Carat')
plt.xlabel('Carat')
plt.ylabel('Frequency')
plt.show()
```



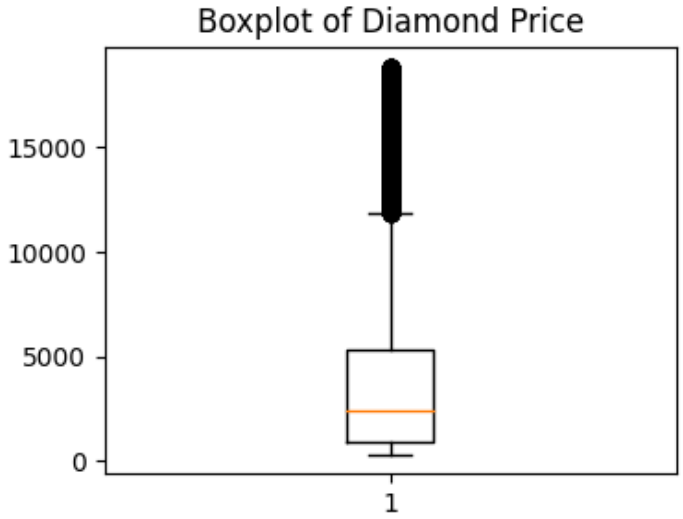
In [6]:

```
plt.bar(data['cut'].unique(), data['cut'].value_counts(), color='skyblue', edgecolor='bla
ck')
plt.title('Barplot of Diamond Cut')
plt.xlabel('Cut')
plt.ylabel('Frequency')
plt.show()
```



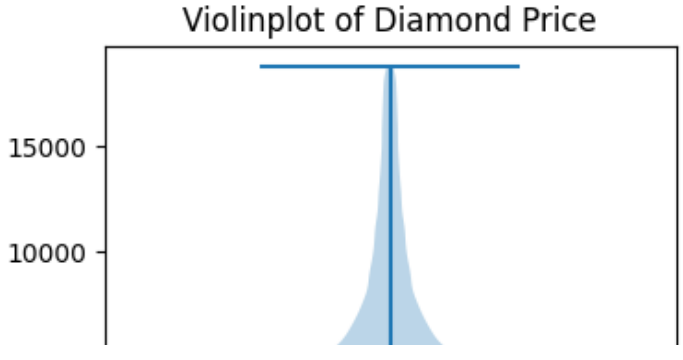
In [7]:

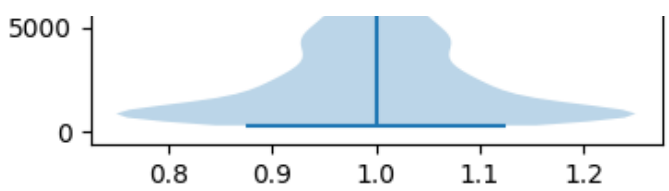
```
plt.boxplot(data[['price']])
plt.title('Boxplot of Diamond Price')
plt.show()
```



In [8]:

```
plt.violinplot(data['price'])
plt.title('Violinplot of Diamond Price')
plt.show()
```



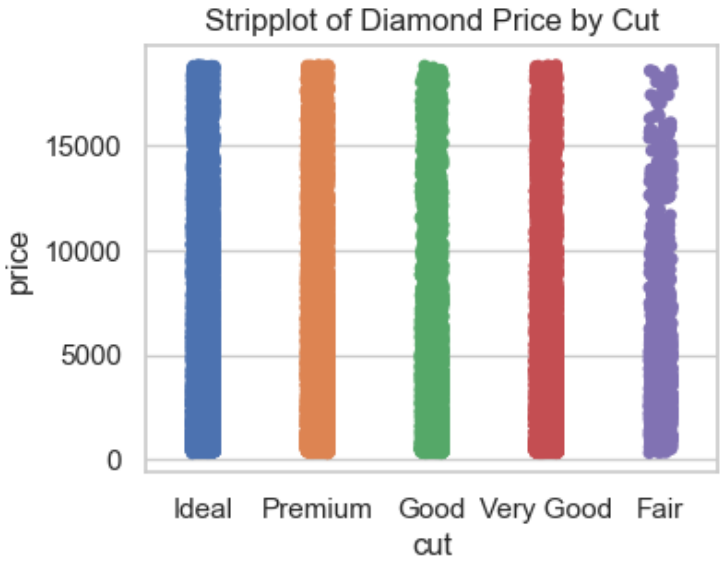


In [9]:

```
sns.set(style='whitegrid')
```

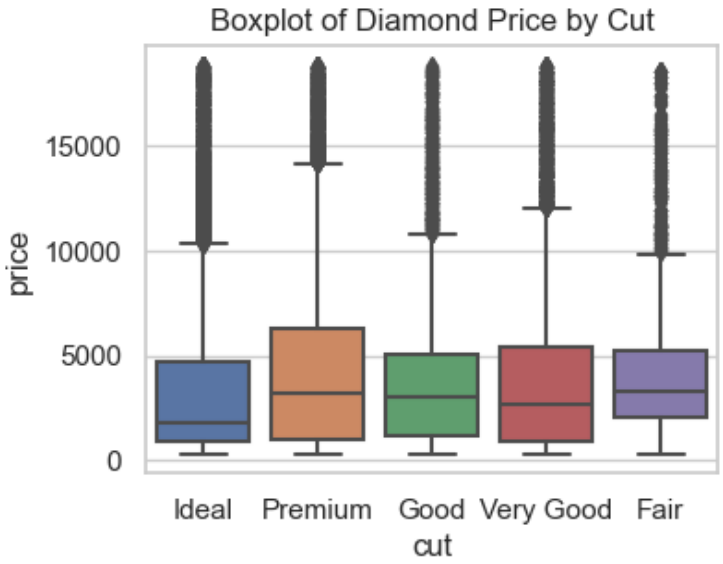
In [10]:

```
plot = sns.stripplot(x='cut', y='price', data=data)
plt.title('Stripplot of Diamond Price by Cut')
plt.show()
```



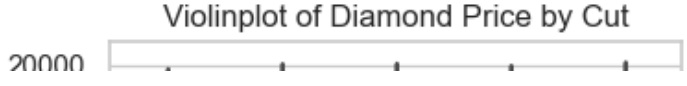
In [11]:

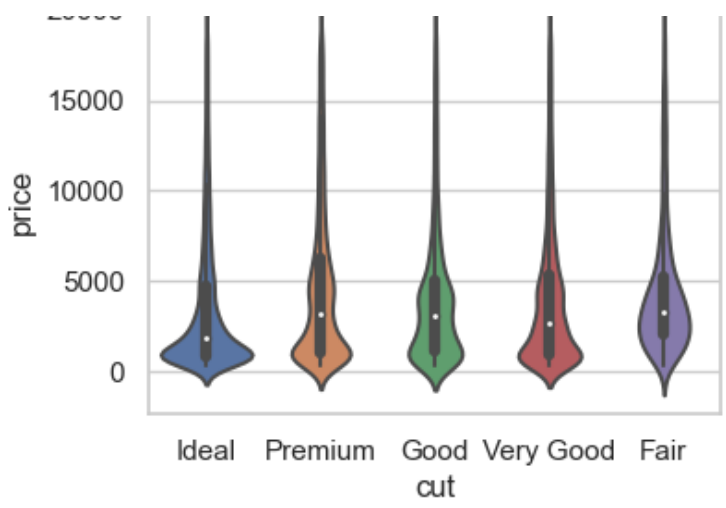
```
plot = sns.boxplot(x='cut', y='price', data=data)
plt.title('Boxplot of Diamond Price by Cut')
plt.show()
```



In [12]:

```
plot = sns.violinplot(x='cut', y='price', data=data)
plt.title('Violinplot of Diamond Price by Cut')
plt.show()
```

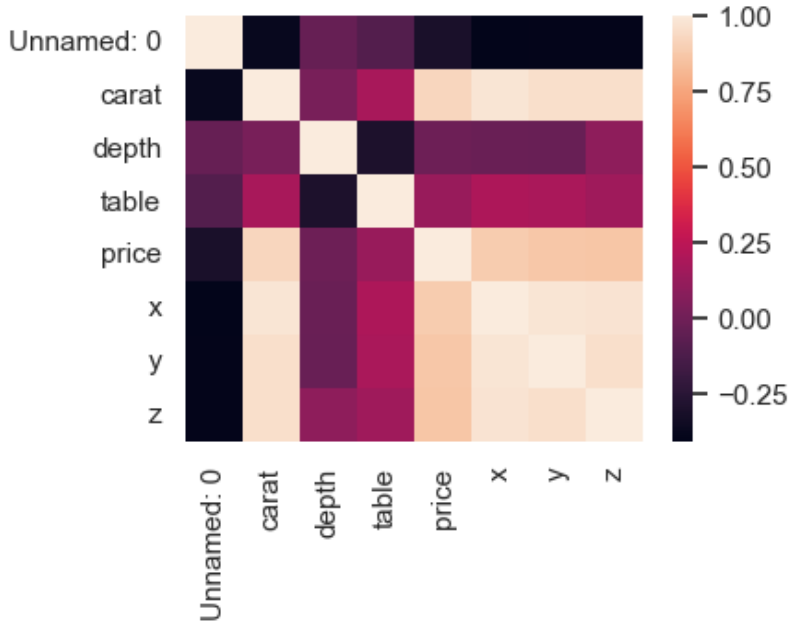




In [13]:

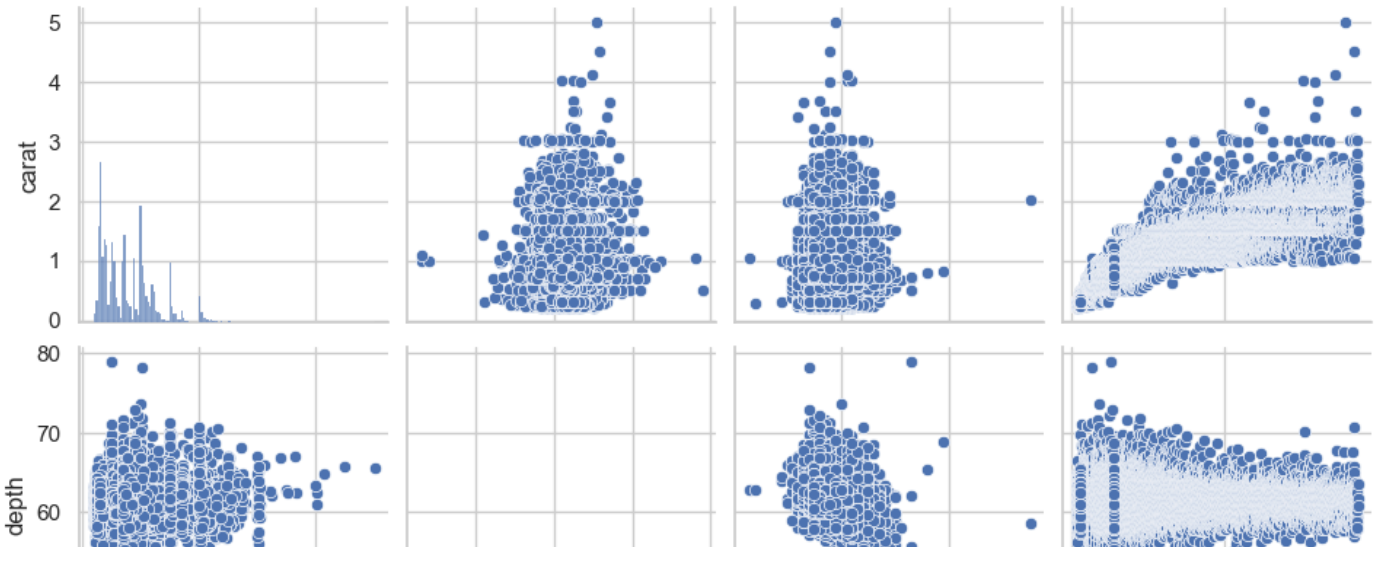
```
plot = sns.heatmap(data.corr(), annot=False)
```

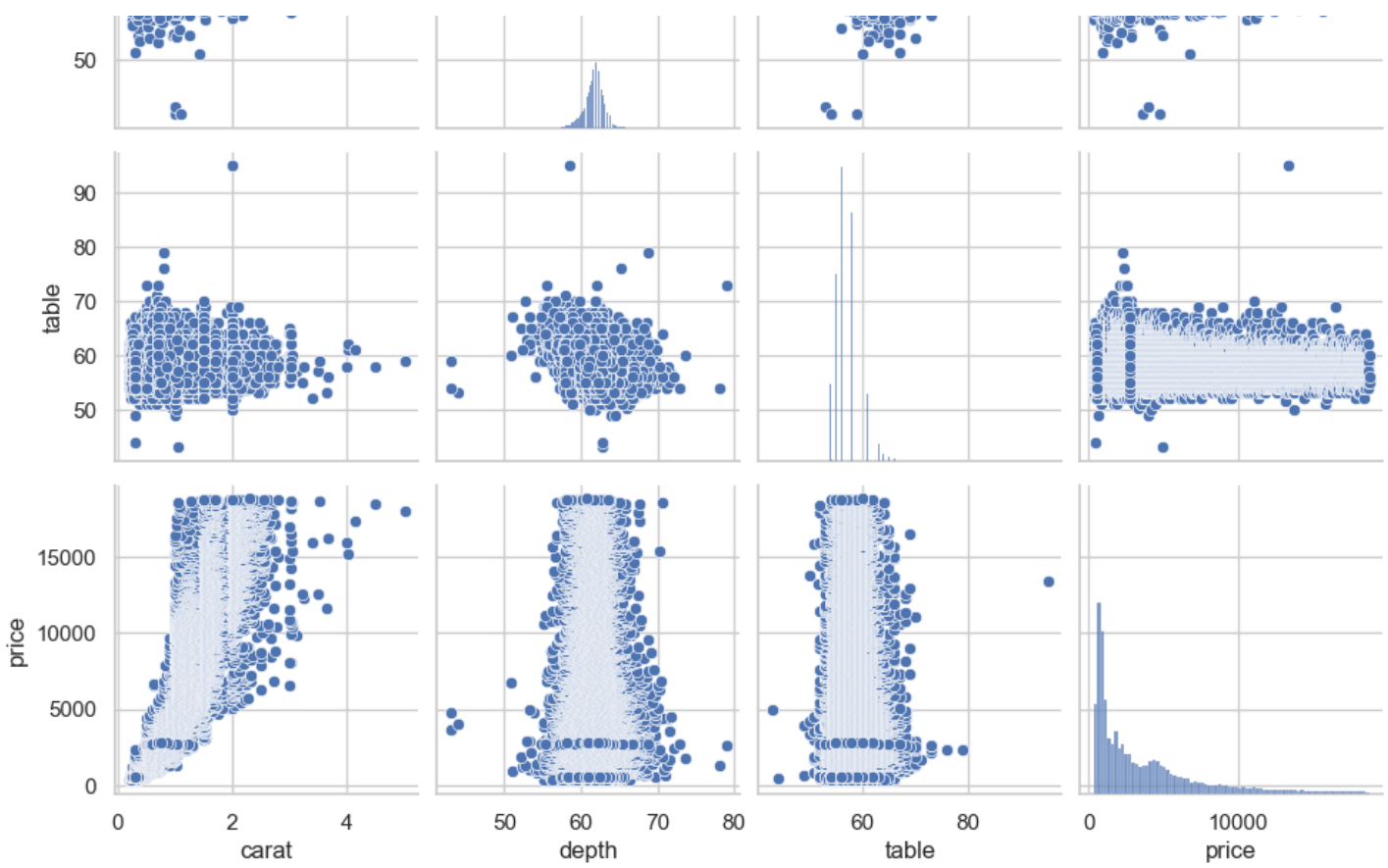
```
C:\Users\dhruv\AppData\Local\Temp\ipykernel_18980\2481743628.py:1: FutureWarning: The def
ault value of numeric_only in DataFrame.corr is deprecated. In a future version, it will
default to False. Select only valid columns or specify the value of numeric_only to silen
ce this warning.
  plot = sns.heatmap(data.corr(), annot=False)
```



In [14]:

```
plot = sns.pairplot(data[['carat', 'depth', 'table', 'price']])
plt.show()
```




50
90
80
70
60
50
table
15000
10000
5000
0
price
0
2
4
carat
50
60
70
80
depth
60
80
table
0
10000
price