NAME : Annapoornima S

ROLL NO : 225229101

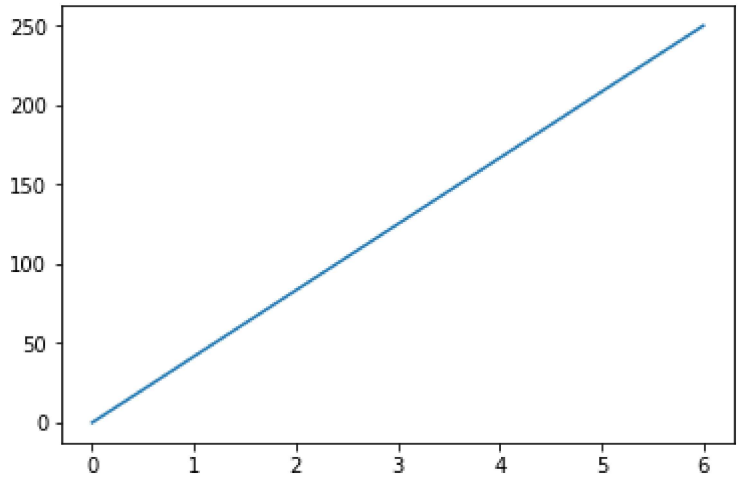
LABSHEET - 13(2D and 3D Data Visualization using Matplotlib and Seaborn) ¶

Question 1 : Plot all 2D and 3D using Matplotlib and Seaborn.

Plot 2D line,bar,histogram and box plot using Matplotlib.

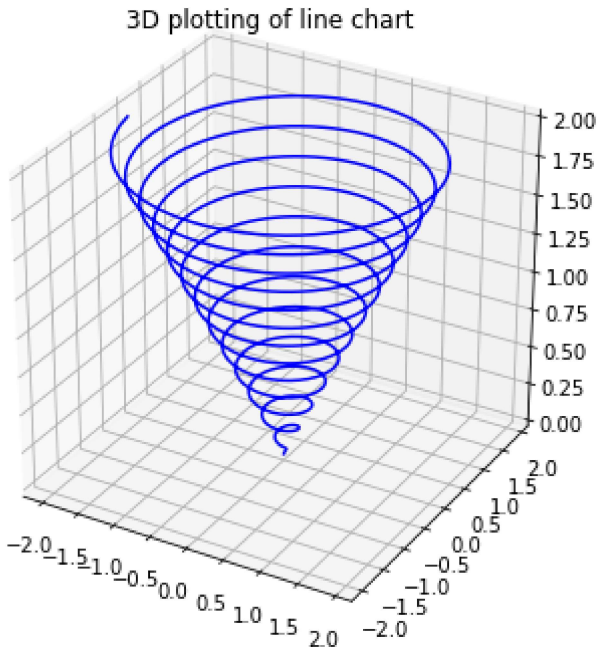
histogram and box plot using Seaborn.

In [6]:
```
import matplotlib.pyplot as plt
import numpy as np
xpoints = np.array([0, 6])
ypoints = np.array([0, 250])
plt.plot(xpoints, ypoints)
plt.show()
```

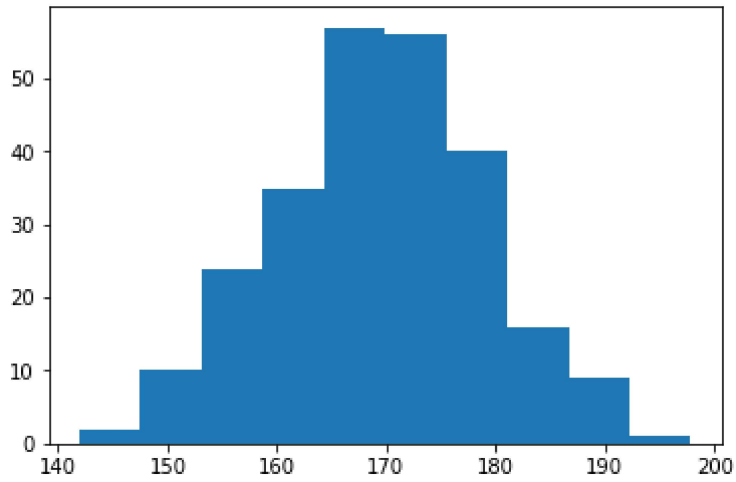


In [2]:

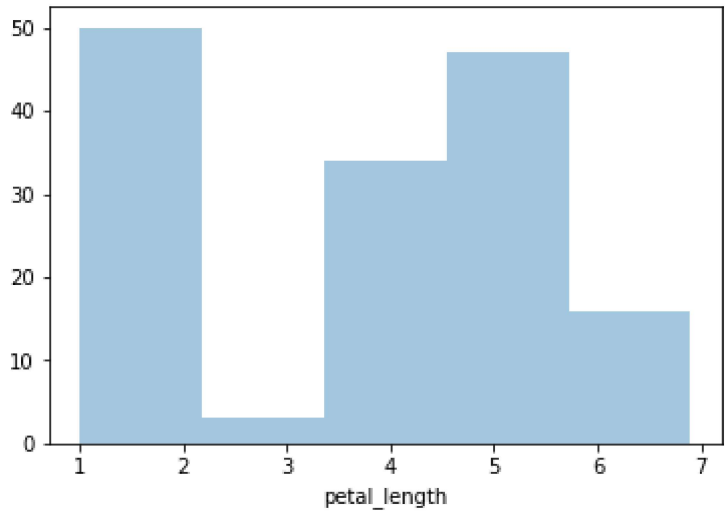
```
import matplotlib.pyplot as pyplot
import numpy as np
from mpl_toolkits import mplot3d

fig = pyplot.figure(figsize = (6, 6))
ax = pyplot.axes(projection = '3d')

#Mentioning all the three different axes.
z = np.linspace(0, 2, 1000)
x = z * np.sin(40 * z)
y = z * np.cos(40 * z)

ax.plot3D(x, y, z, 'blue')
ax.set_title('3D plotting of line chart')

# Print the chart
pyplot.show()
```



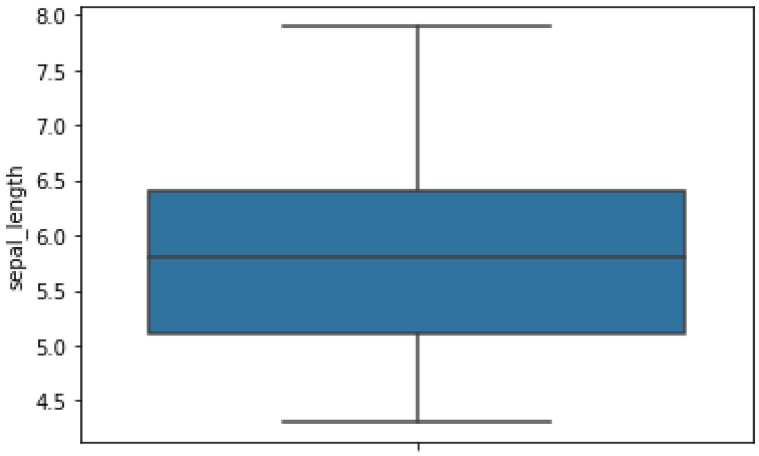
In [3]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.random.normal(170, 10, 250)

plt.hist(x)
plt.show()
```



In [8]:
```
import pandas as pd
import seaborn as sb
from matplotlib import pyplot as plt
df = sb.load_dataset('iris')
sb.distplot(df['petal_length'],kde = False)
plt.show()
```



In [9]:
```
import seaborn as sns
import matplotlib.pyplot as plt

df = sns.load_dataset('iris')
df.head()

sns.boxplot( y=df["sepal_length"] );
plt.show()
```



In [ ]:
```

```