

week2

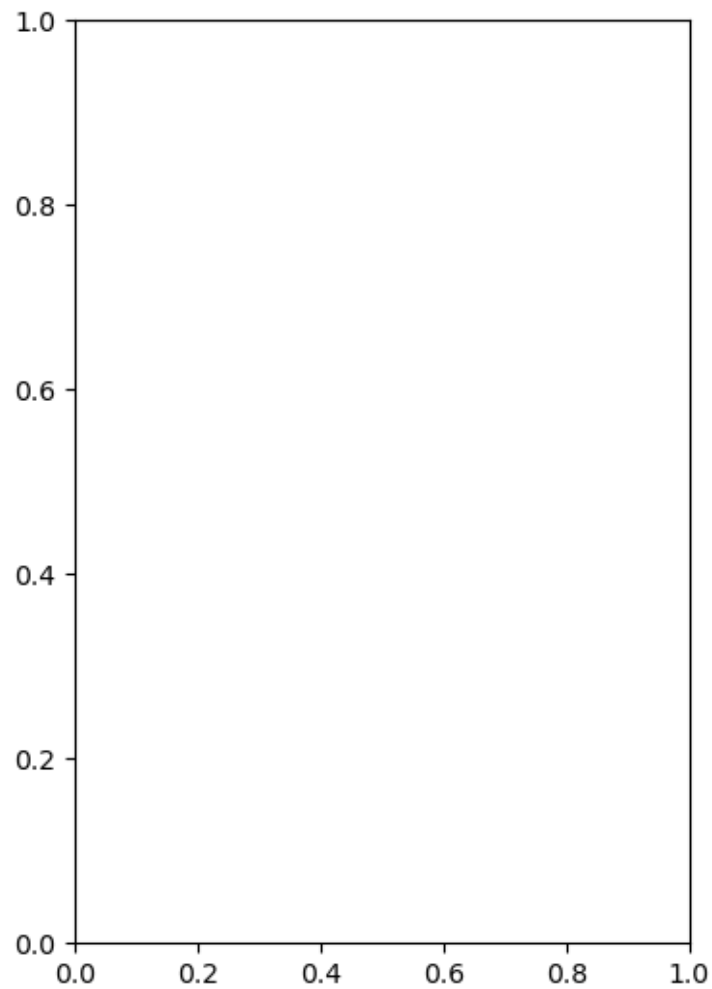
August 2, 2024

```
[36]: %matplotlib inline
import matplotlib.pyplot as plt
```

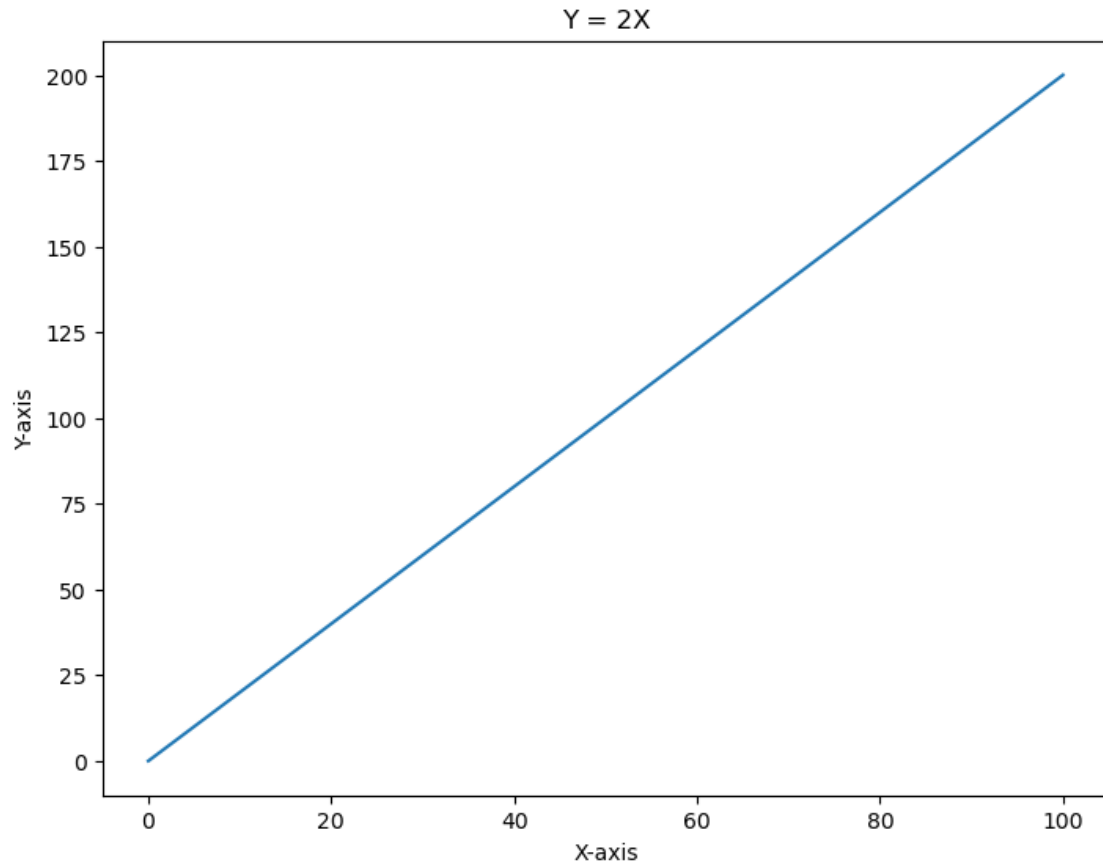
```
[41]: import matplotlib.pyplot as plt
plt1=plt.figure()
axes = plt1.add_axes([3, 3, 0.5, 1])
plt1.show()
```

/tmp/ipykernel_7247/668078155.py:4: UserWarning: Matplotlib is currently using module://matplotlib_inline.backend_inline, which is a non-GUI backend, so cannot show the figure.

```
plt1.show()
```

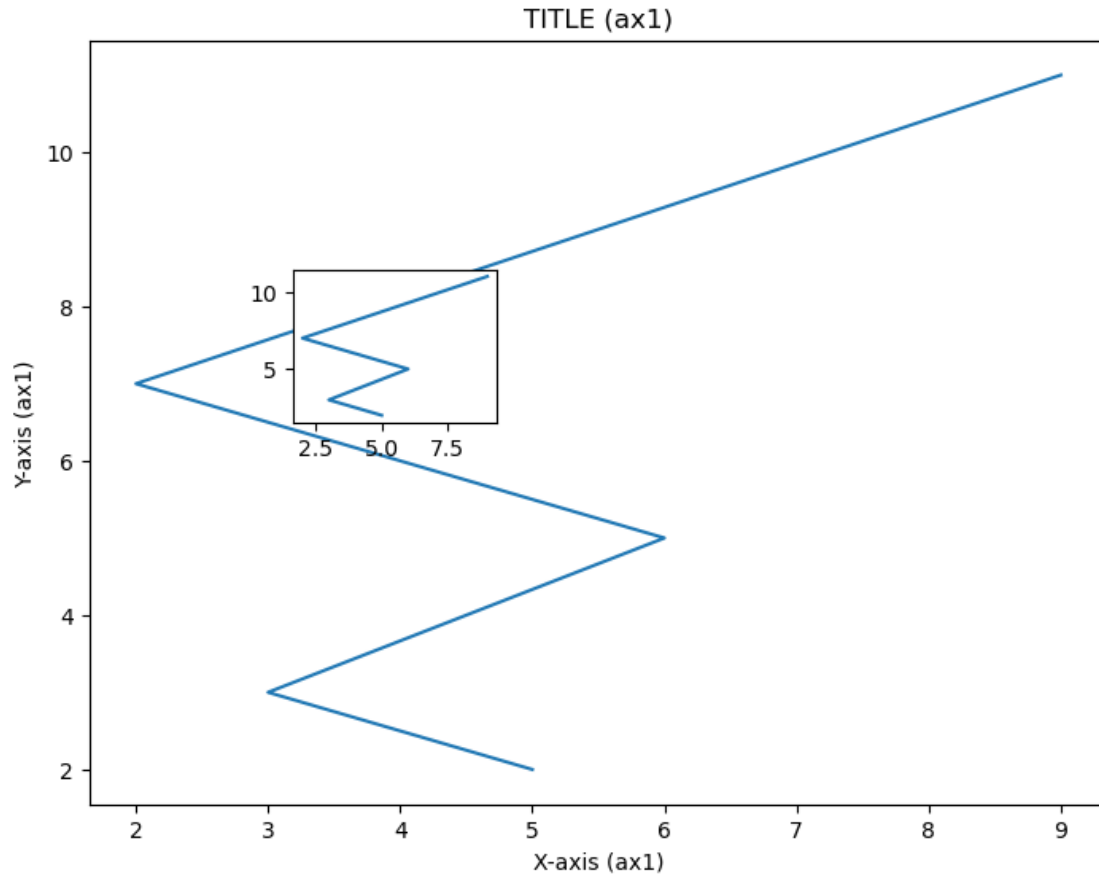


```
[38]: #q1
fig = plt.figure()
ax = fig.add_axes([0, 0, 1, 1])
x = [0, 20, 40, 60, 80, 100]
y = [0, 40, 80, 120, 160, 200]
ax.plot(x, y)
ax.set_xlabel('X-axis')
ax.set_ylabel('Y-axis')
ax.set_title('Y = 2X')
plt.show()
```

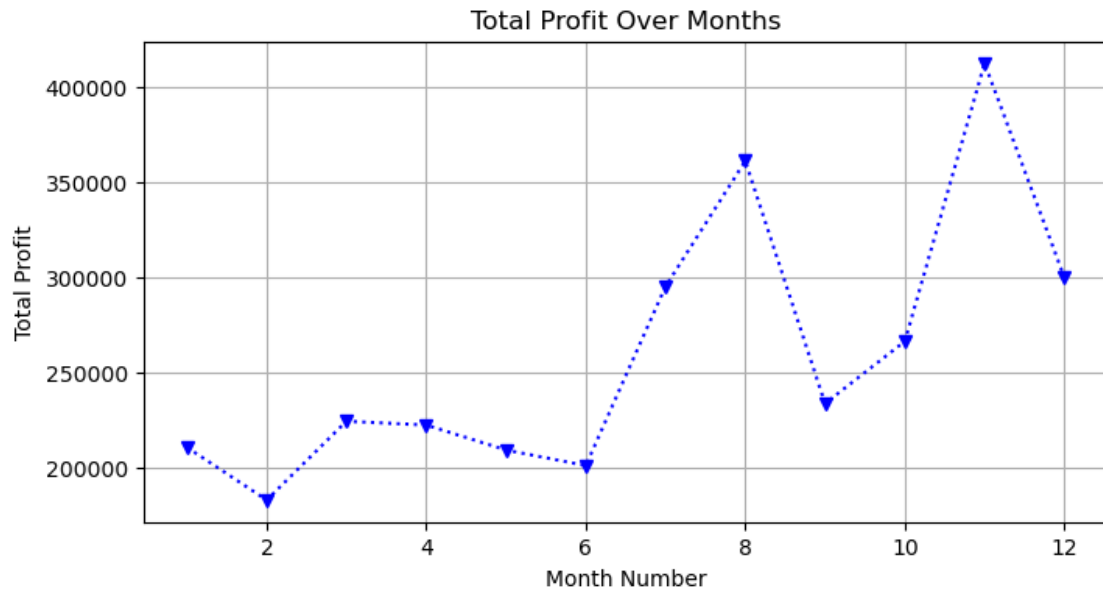


```
[46]: import matplotlib.pyplot as plt
fig = plt.figure()
ax1 = fig.add_axes([0, 0, 1, 1])
ax2 = fig.add_axes([0.2, 0.5, 0.2, 0.2])
x = [5, 3, 6, 2, 9]
y = [2, 3, 5, 7, 11]
ax1.plot(x, y)
ax1.set_xlabel('X-axis (ax1)')
ax1.set_ylabel('Y-axis (ax1)')
ax1.set_title('TITLE (ax1)')
ax2.plot(x, y)
```

```
[46]: [<matplotlib.lines.Line2D at 0x7c42704f1af0>]
```



```
[62]: import pandas as pd
import matplotlib.pyplot as plt
df = pd.read_csv('/home/student/220962076_ML_LAB/Week 2/ML lab week 02 material/
↳company_sales_data.csv')
months = df['month_number']
total_profit = df['total_profit']
plt.figure(figsize=(8, 4))
plt.plot(months, total_profit, marker='v', linestyle=':', color='b')
plt.xlabel('Month Number')
plt.ylabel('Total Profit')
plt.title('Total Profit Over Months')
plt.grid(True)
plt.show()
```



```
[61]: import pandas as pd
import matplotlib.pyplot as plt
df = pd.read_csv('/home/student/220962076_ML_LAB/Week 2/ML lab week 02 material/
↳company_sales_data.csv')
month = df['month_number']
total_profit = df['total_units']
plt.plot(month, total_profit, linestyle=':', color='red',
↳marker='o',markerfacecolor='red',linewidth=3, label='Total profit')
plt.xlabel('Month Number')
plt.ylabel('Sold units number')
plt.title('Total profits over months')
plt.legend(loc='lower right')
plt.grid('true')
plt.show()
```

