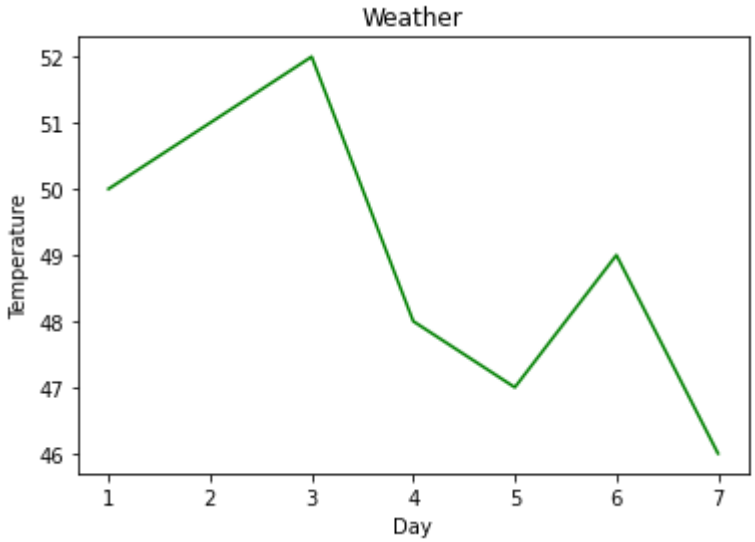
In [1]:
```
import matplotlib.pyplot as plt
%matplotlib inline
```

In [2]:
```
x=[1,2,3,4,5,6,7]
y=[50,51,52,48,47,49,46]
```

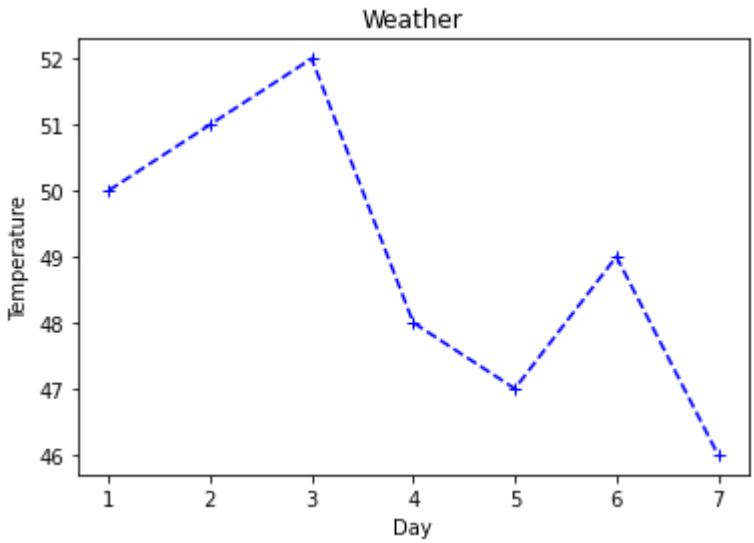
In [42]:
```
plt.xlabel('Day')
plt.ylabel('Temperature')
plt.title('Weather')
plt.plot(x,y,color='green')
```

Out[42]:
```
[<matplotlib.lines.Line2D at 0x227711ca980>]
```



In [4]:
```
plt.xlabel('Day')
plt.ylabel('Temperature')
plt.title('Weather')

plt.plot(x,y,'b+--')
```

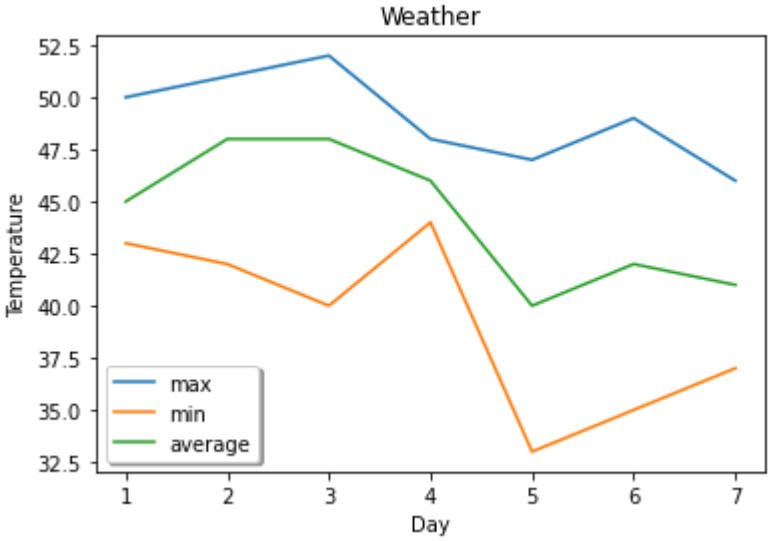
Out[4]:
```
[<matplotlib.lines.Line2D at 0x2276ed833a0>]
```



In [5]:
```
days=[1,2,3,4,5,6,7]
max_t=[50,51,52,48,47,49,46]
min_t=[43,42,40,44,33,35,37]
avg_t=[45,48,48,46,40,42,41]
```

In [6]:
```
plt.xlabel('Day')
plt.ylabel('Temperature')
plt.title('Weather')

plt.plot(days, max_t, label="max")
plt.plot(days, min_t, label="min")
plt.plot(days, avg_t, label="average")

plt.legend(loc='best',shadow=True)
```

Out[6]:
```
<matplotlib.legend.Legend at 0x2276edef7c0>
```

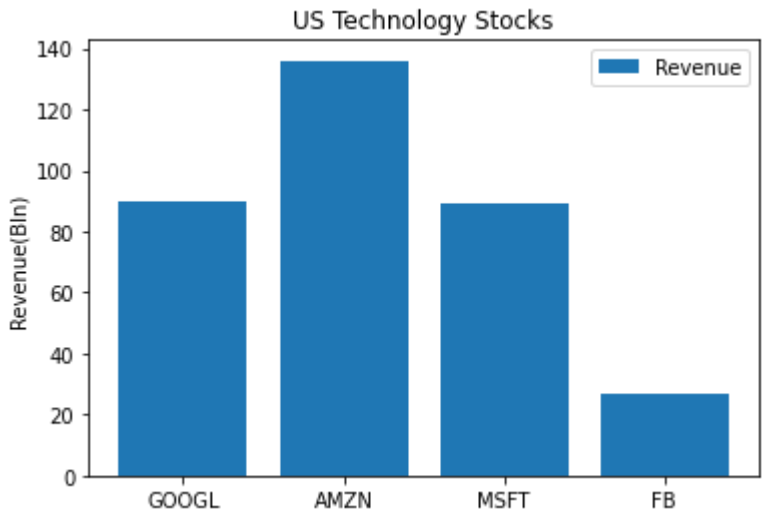


In [7]:
```
import numpy as np
```

In [8]:
```
company=['GOOGL','AMZN','MSFT','FB']
revenue=[90,136,89,27]
```

In [13]:
```
plt.ylabel("Revenue(Bln)")
plt.title('US Technology Stocks')
plt.bar(company,revenue,label = "Revenue")
plt.legend()
```

Out[13]:
```
<matplotlib.legend.Legend at 0x2276ef2a530>
```



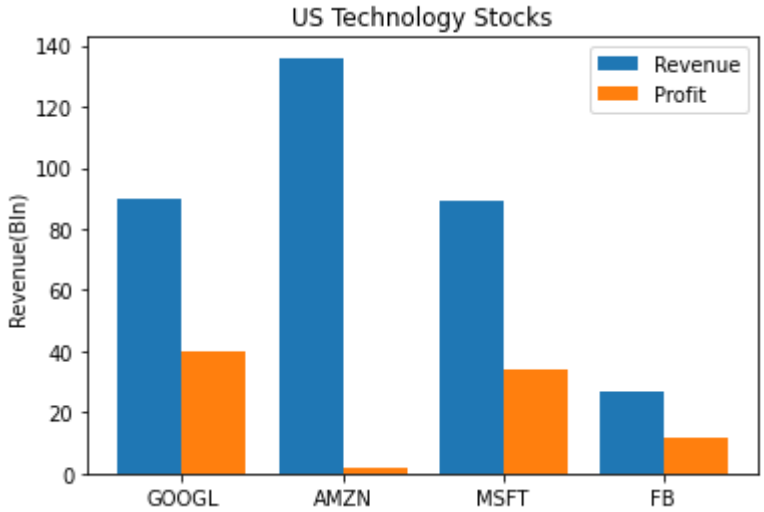
In [22]:
```
xpos = np.arange(len(company))
xpos
```

Out[22]:
```
array([0, 1, 2, 3])
```

In [23]:
```
profit=[40,2,34,12]
```

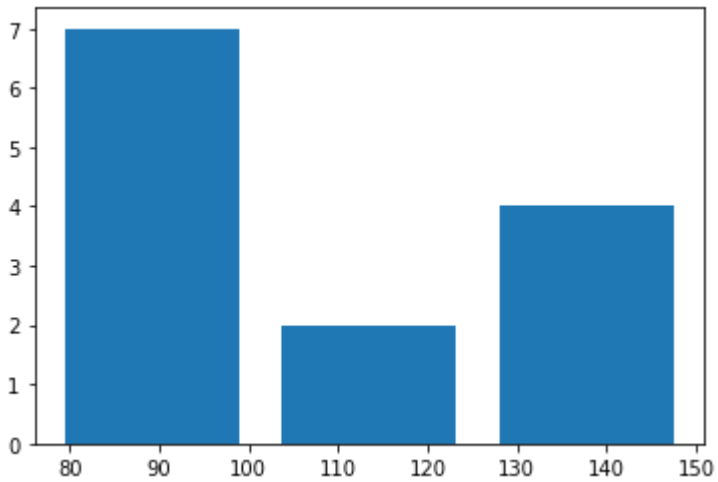
In [24]:
```
plt.bar(xpos-0.2,revenue, width=0.4, label="Revenue")
plt.bar(xpos+0.2,profit, width=0.4,label="Profit")

plt.xticks(xpos,company)
plt.ylabel("Revenue(Bln)")
plt.title('US Technology Stocks')
plt.legend()
```

Out[24]:
```
<matplotlib.legend.Legend at 0x2276f1f3310>
```



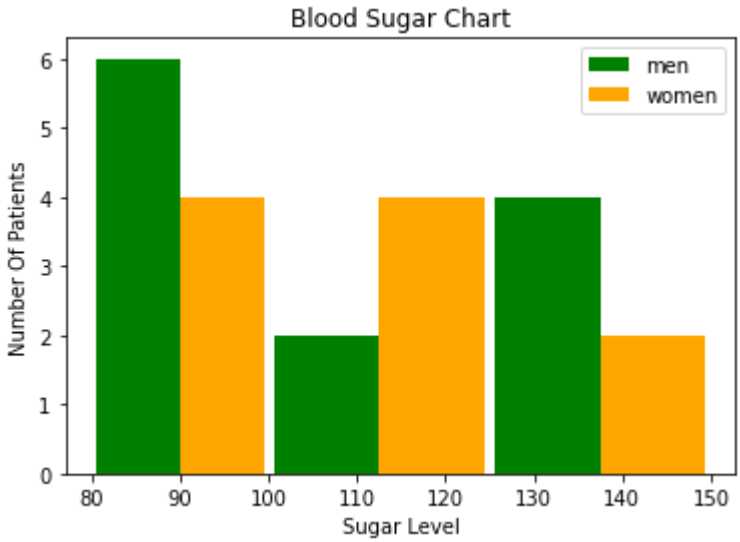
In [26]:
```
blood_sugar = [113, 85, 90, 150, 149, 88, 93, 115, 135, 80, 77, 82, 129]
plt.hist(blood_sugar,bins=3, rwidth=0.8) # by default number of bins is set to 10
```

Out[26]:
```
(array([7., 2., 4.]),
 array([ 77.        , 101.33333333, 125.66666667, 150.        ]),
 <BarContainer object of 3 artists>)
```

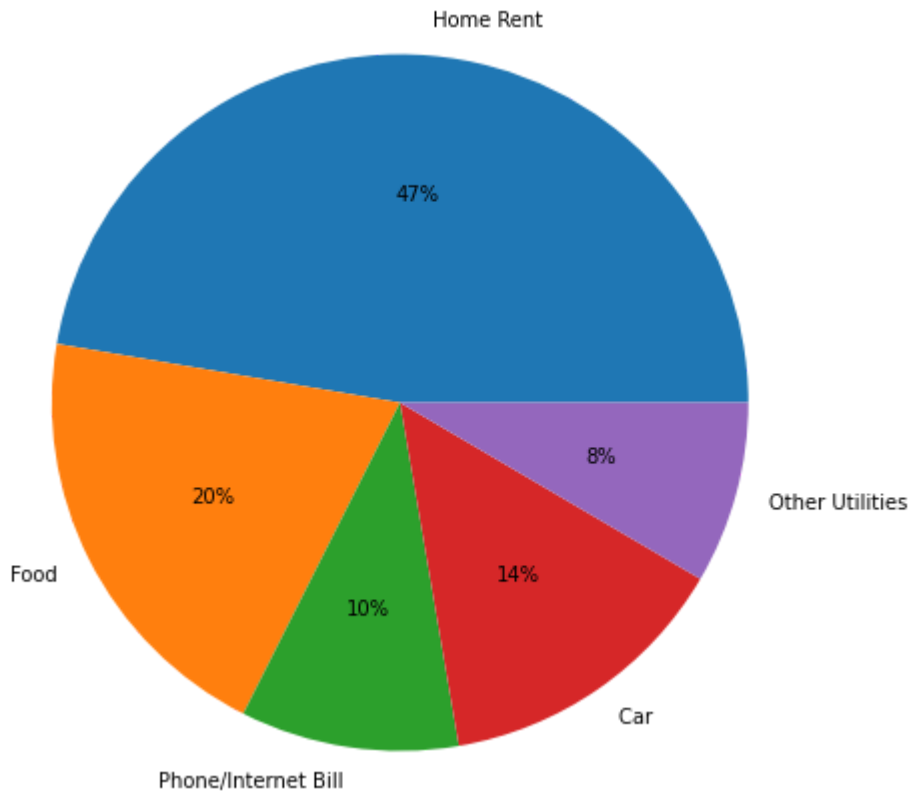


In [27]:
```
plt.xlabel("Sugar Level")
plt.ylabel("Number Of Patients")
plt.title("Blood Sugar Chart")

blood_sugar_men = [113, 85, 90, 150, 149, 88, 93, 115, 135, 80, 77, 82, 129]
blood_sugar_women = [67, 98, 89, 120, 133, 150, 84, 69, 89, 79, 120, 112, 100]

plt.hist([blood_sugar_men,blood_sugar_women], bins=[80,100,125,150], rwidth=0.95, col
or=['green','orange'],label=['men','women'])
plt.legend()
```

Out[27]: <matplotlib.legend.Legend at 0x227702bc280>



In [40]:
```
exp_vals = [1400,600,300,410,250]
exp_labels = ["Home Rent","Food","Phone/Internet Bill","Car ","Other Utilities"]
plt.pie(exp_vals,labels=exp_labels,radius = 2,autopct='%0.0f%%')
plt.show()
```



In [ ]: