In [1]:
```
#Date :- 07/05/2021
#Assignment-1 :
#Name :- Adsul Gokul Babasaheb
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```
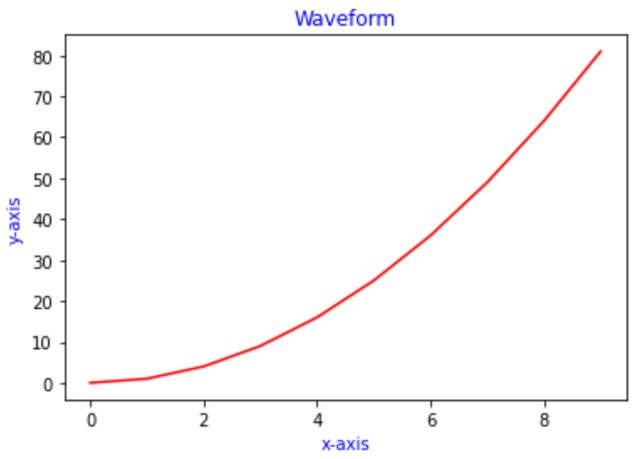

In [2]:
```
import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib as mpl
import matplotlib.pyplot as plt
%matplotlib inline
```

In [3]:
```
#Question 1 :
#plot a line plot for

x=np.arange(0,10)
y=x*x
```

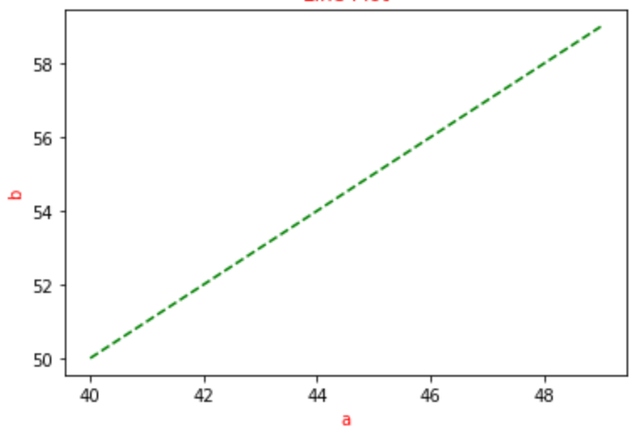
In [7]:
```
x=np.arange(0,10)
y=x*x
plt.title('Waveform',color='blue')
plt.xlabel('x-axis',color='blue')
plt.ylabel('y-axis',color='blue')
plt.plot(x,y,color='r')
```

Out[7]: [<matplotlib.lines.Line2D at 0x19f86044d90>]

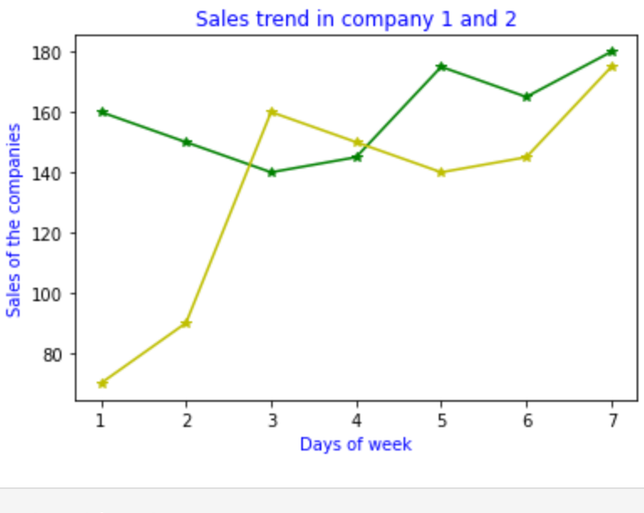


In [8]:
```
#Practice exercise: Plot a line plot between a and b

a=np.arange(40,50)
b=np.arange(50,60)
plt.title('Line Plot',color='r')
plt.xlabel('a',color='r')
plt.ylabel('b',color='r')
plt.plot(a,b,'g--',)
```

Out[8]: [<matplotlib.lines.Line2D at 0x19f860ae0a0>]



In [10]:
```
#Question 2 :
# Plot a line plot showing the sales trend in company 1 and 2

days = [1,2,3,4,5,6,7] #days of the week
sales_1 = [160,150,140,145,175,165,180] #sales of company1
sales_2 = [70,90,160,150,140,145,175] #sales of company2
plt.title("Sales trend in company 1 and 2",color='b')
plt.xlabel("Days of week",color='b')
plt.ylabel("Sales of the companies",color='b')
plt.plot(days,sales_1,'g*-',color='g')
plt.plot(days,sales_2,'g*-',color='y')
plt.show()
```



In [11]:
```
#Question 3 :
#Create a 3 by 3 subplots:

#multiple plots
x = [1,2,3,4]
y1 = [4,3,2,1]
y2 = [10,20,30,40]
y3 = [40,30,20,10]
y4 = [1,2,1,2]
y5 = [40,70,90,70]

plt.suptitle('Multiple plots',color='b')
plt.subplot(3,3,1)
plt.plot(x,y1,'g*-',color='r')
plt.subplot(3,3,2)
plt.plot(x,y2,'g*-',color='y')
plt.subplot(3,3,3)
plt.plot(x,y3,'g*-',color='g')
plt.subplot(3,3,4)
plt.plot(x,y4,'g*-',color='y')
plt.subplot(3,3,5)
plt.plot(x,y5,'g*-',color='g')
```

Out[11]: [<matplotlib.lines.Line2D at 0x19f86298700>]

In [ ]: