1. BASICS

c) Subplots

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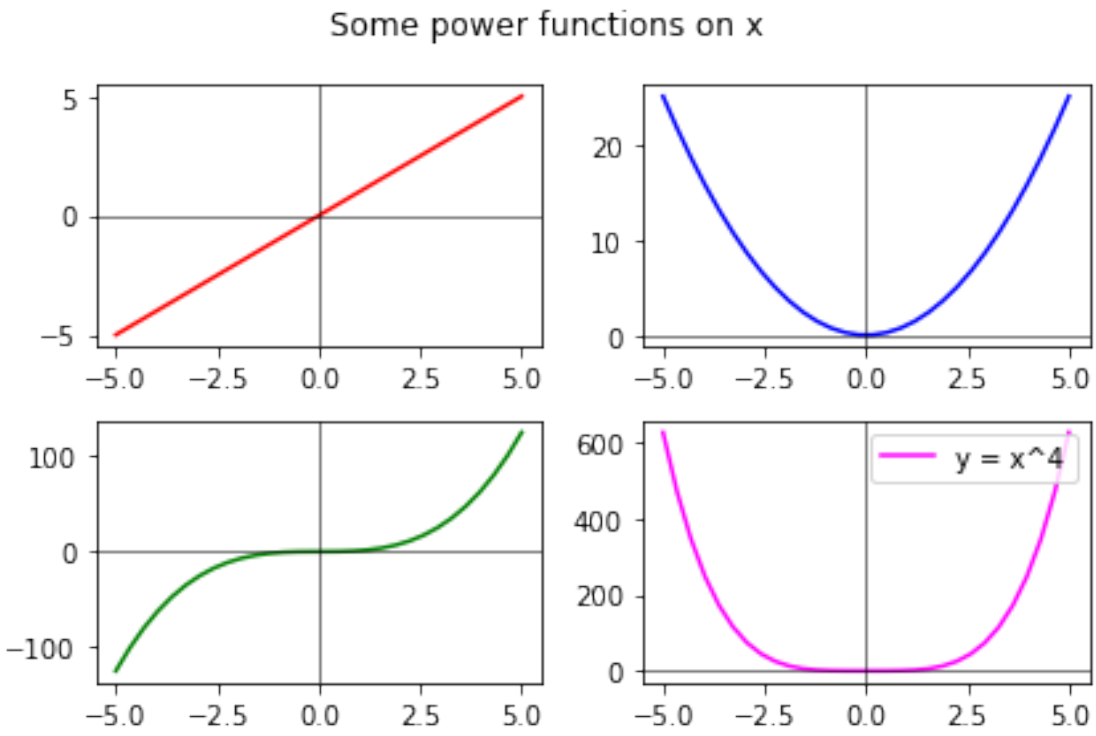
1 AIM

This is a part of plotting recap. Here, we will be plotting the first four power functions i.e. x, x^2, x^3 and x^4. We will plot them as separate graphs, but also as graphs within a single grid i.e. each plot will be a subplot in a grid of plots.

[14]:
```
import matplotlib.pyplot as plt
from numpy import linspace
plt.suptitle("Some power functions on x")

x = linspace(-5, 5, 30)

plt.subplot(2, 2, 1)
plt.plot(x, x, color = "red", label = "y = x")
plt.axhline(lw=0.5, color='black')
plt.axvline(lw=0.5, color='black')

plt.subplot(2, 2, 2)
plt.plot(x, x**2, color = "blue", label = "y = x^2")
plt.axhline(lw=0.5, color='black')
plt.axvline(lw=0.5, color='black')

plt.subplot(2, 2, 3)
plt.plot(x, x**3, color = "green", label = "y = x^3")
plt.axhline(lw=0.5, color='black')
plt.axvline(lw=0.5, color='black')

plt.subplot(2, 2, 4)
plt.plot(x, x**4, color = "magenta", label = "y = x^4")
plt.axhline(lw=0.5, color='black')
plt.axvline(lw=0.5, color='black')


plt.legend()

plt.tight_layout()
None
```



2 CONCLUSION

Subplots allow us to view multiple graphs in an organised arrangement.