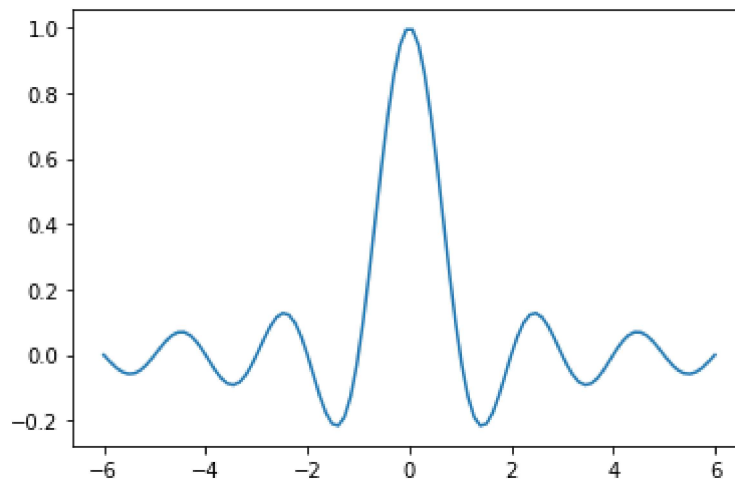# Use matplotlib

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

In [2]:
```python
xs = np.linspace(-6, 6, 100)
ys = np.sinc(xs)
```

In [3]:
```python
plt.plot(xs, ys)
```
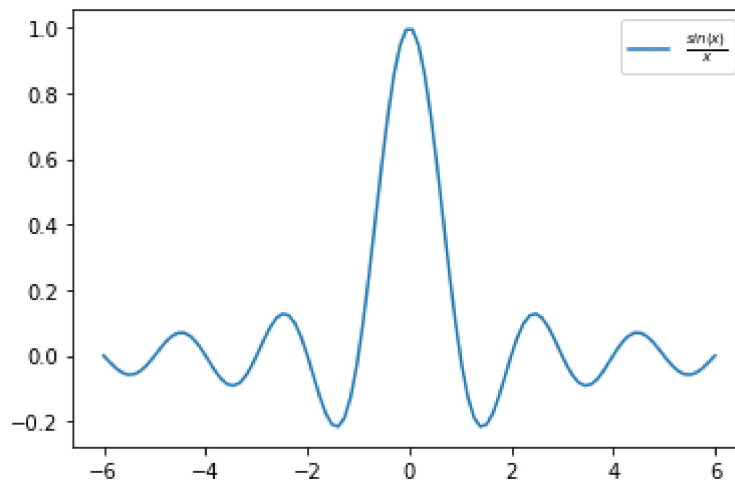
Out[3]: [<matplotlib.lines.Line2D at 0x23c63517f08>]
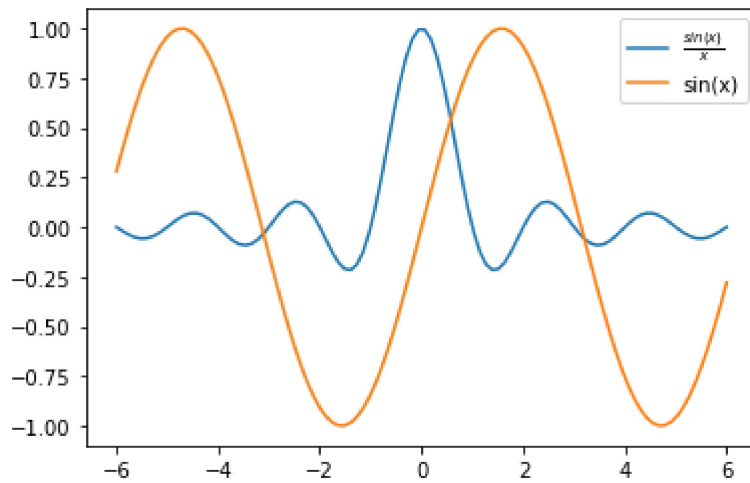

In [4]:
```python
plt.plot(xs, ys, label=r'$\frac{sin(x)}{x}$')
plt.legend()
```

Out[4]: <matplotlib.legend.Legend at 0x23c63d78708>

In [5]:
```python
plt.plot(xs, ys, label=r'$\frac{sin(x)}{x}$')
plt.plot(xs, np.sin(xs), label='sin(x)')
plt.legend()
```

Out[5]: <matplotlib.legend.Legend at 0x23c63e7a788>

In [9]:
```python
plt.subplot(2, 1, 1)
plt.plot(xs, np.sin(xs), label='sin')
plt.legend()
plt.subplot(2, 1, 2)
plt.fill(xs, -xs**2, label=r'${-x}^2$')
plt.legend()
```

Out[9]: <matplotlib.legend.Legend at 0x23c64060188>