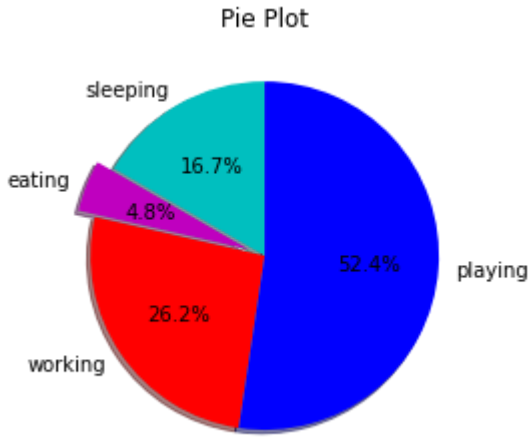
Name: - L Prathyusha

Visualization with data

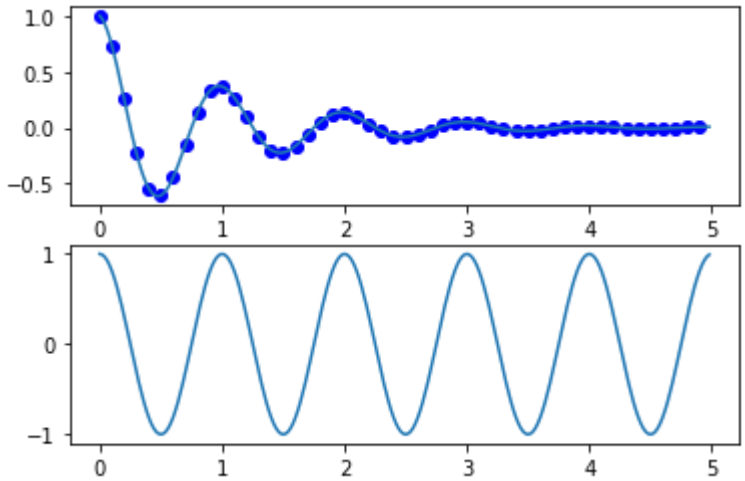
In [3]:

```
import matplotlib.pyplot as plt

slices=[7,2,11,22]
activities=['sleeping','eating','working','playing']

cols=['c','m','r','b']
plt.pie(slices,
        labels=activities,
       colors=cols,
       startangle=90,
       shadow=True,
       explode=(0,0.1,0,0),
       autopct='%1.1f%%')

plt.title('Pie Plot')
plt.show()
```



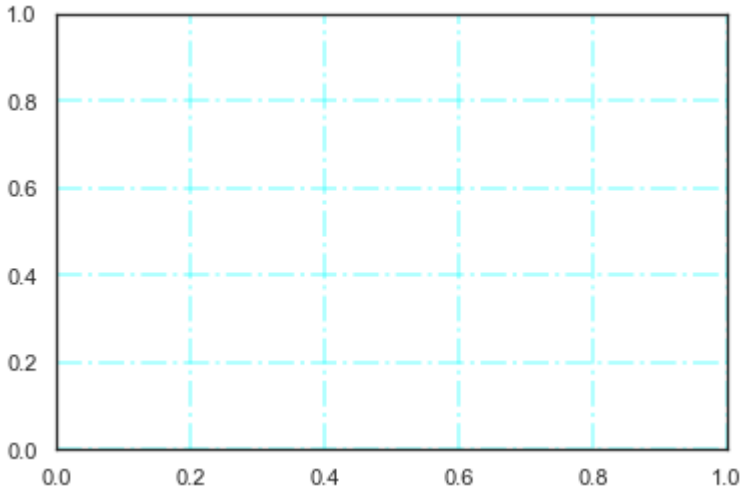
In [4]:

```
import numpy as np
import matplotlib.pyplot as plt


def f(t):
    return np.exp(-t)*np.cos(2*np.pi*t)

t1=np.arange(0.0,5.0,0.1)
t2=np.arange(0.0,5.0,0.02)

plt.subplot(211)
plt.plot(t1,f(t1),'bo',t2,f(t2))

plt.subplot(212)
plt.plot(t2,np.cos(2*np.pi*t2))
plt.show()
```



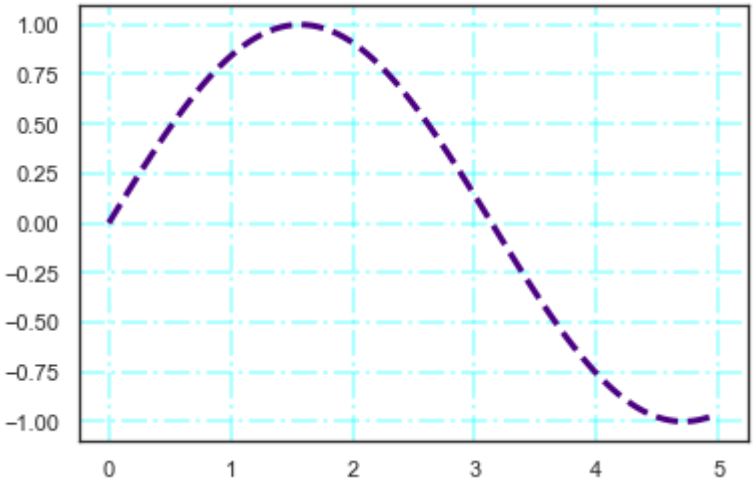
In [6]:

```
fig = plt.figure()
ax = plt.axes()
plt.grid(b=True, color='aqua', alpha=0.3, linestyle='-.', linewidth=2)
```



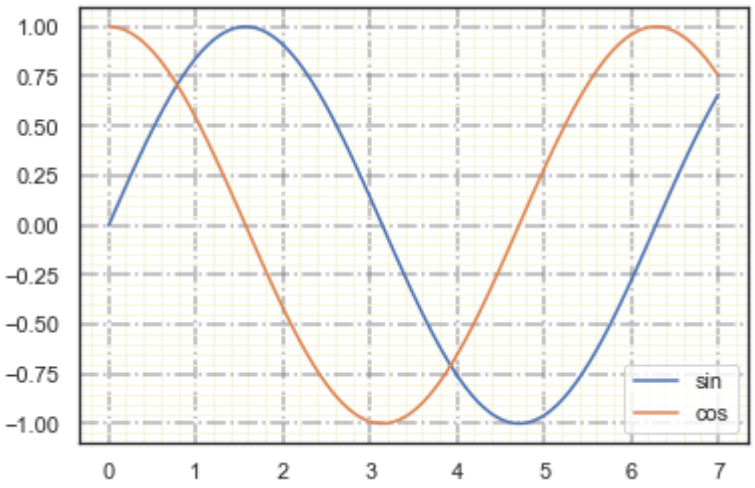
In [9]:

```
import numpy as np
import matplotlib.pyplot as plt
fig = plt.figure()
ax = plt.axes()
x = np.linspace(0, 5, 100)
plt.plot(x, np.sin(x), color='Indigo', linestyle='--', linewidth=3)
plt.grid(b=True, color='aqua', alpha=0.3, linestyle='-.', linewidth=2)
plt.show()
```



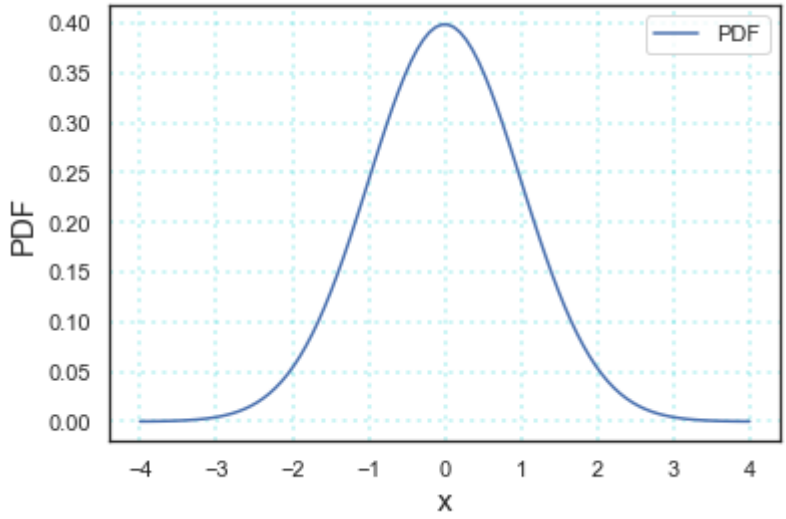
In [10]:

```
import numpy as np
import matplotlib.pyplot as plt
x = np.linspace(0, 7, 100)
line1, = plt.plot(x, np.sin(x), label='sin')
line2, = plt.plot(x, np.cos(x), label='cos')
plt.legend(handles=[line1, line2], loc='lower right')
#major grid lines
plt.grid(b=True, which='major', color='gray', alpha=0.6, linestyle='dashdot', lw=1.5)
#minor grid lines
plt.minorticks_on()
plt.grid(b=True, which='minor', color='beige', alpha=0.8, ls='-', lw=1)
plt.show()
```



In [11]:

```
import numpy as np
import matplotlib.pyplot as plt
import scipy.stats as stats
mu = 0
std = 1
x = np.linspace(start=-4, stop=4, num=100)
y = stats.norm.pdf(x, mu, std)
plt.plot(x, y, label='PDF')
plt.xlabel('x', fontsize=15)
plt.ylabel('PDF', fontsize=15)
plt.grid(b=True, color='DarkTurquoise', alpha=0.2, linestyle=':', linewidth=2)
plt.rcParams['figure.figsize'] = [10/2.54, 8/2.54]
plt.legend()
plt.show()
```



In [ ]:

```

```