Mie Theory Task : 6

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Importing necessary libraries

In [36]:
```
import TryMie
import numpy as np
import matplotlib.pyplot as plt
```

Definition and assignment of variables size_parameter and rel_ref_index

In [38]:
```
# definition and assignment of size parameter variable
sp = np.arange(1,100,1)
# definition and assignment of relative refractive index variable
rri = complex(1.33,0.001)
```

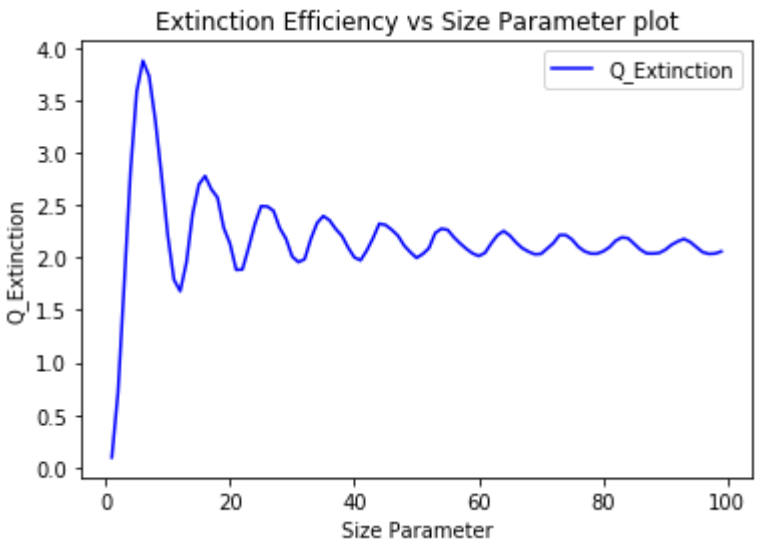
Calculating Extinction Efficiency

In [44]:
```
# definition and assignment of extinction efficiency variable
ext_eff = np.array([TryMie.bhmie(i,rri)[0:2] for i in sp])
```

Plot of Extinction Efficiency with respect to size parameter

In [49]:
```
plt.plot(sp,ext_eff[:,0]+ext_eff[:,1],label='Q_Extinction', color = 'blue')
plt.title('Extinction Efficiency vs Size Parameter plot')
plt.xlabel('Size Parameter')
plt.ylabel('Q_Extinction')
plt.legend()
```

Out[49]:
```
<matplotlib.legend.Legend at 0x7fd0131275d0>
```



In [ ]: