In [3]:

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

In [10]:

```
#nlist = 10**np.array([1,2,3,4])
nlist = np.arange(64,1e3,64,dtype=int)
```

In [11]:

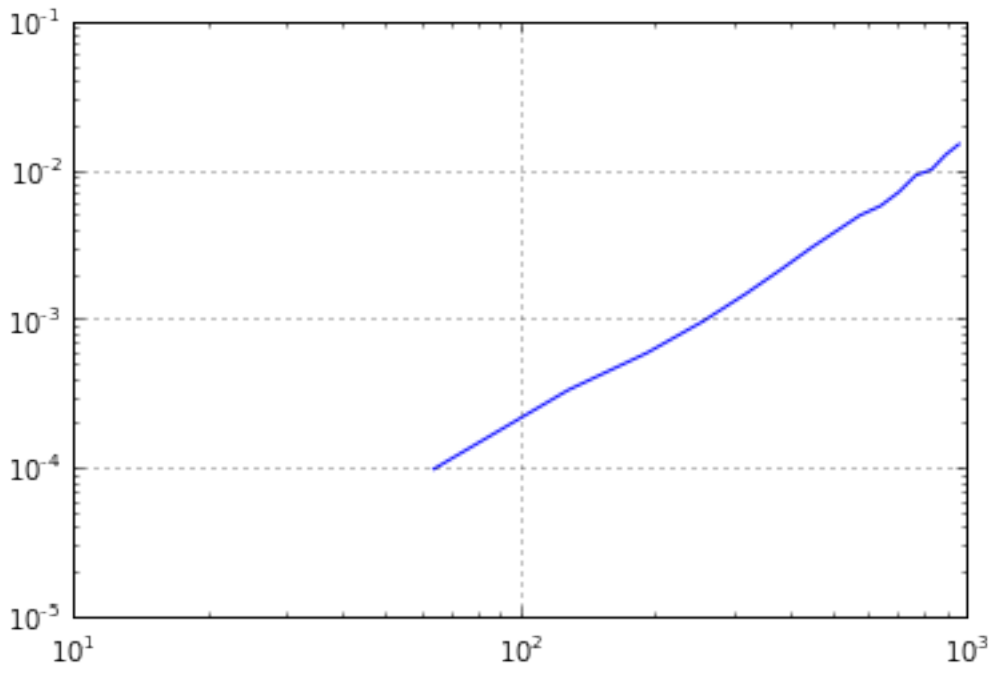
```
tavg = []
tmax = []
tmin = []

for n in nlist:
    v = np.ones((n,n),dtype=np.float16)
    w = np.ones((n,n),dtype=np.float16)
    u = v + w

    m=5
    ts = np.zeros((m,))
    for i in range(m):
        t = time.time()
        u = v + w
        ts[i] = time.time() - t
    tavg.append(ts.mean())
    tmax.append(ts.max())
    tmin.append(ts.min())
```

In [12]:

```
plt.loglog(nlist, tavg)
plt.grid(True)
#plt.loglog(nlist, tmax)
#plt.loglog(nlist, tmin)
```



In [39]:

```
v.nbytes
```

Out[39]:

79872

In [38]:

```
32 * 1024
```

Out[38]:

32768

In [ ]:

```

```