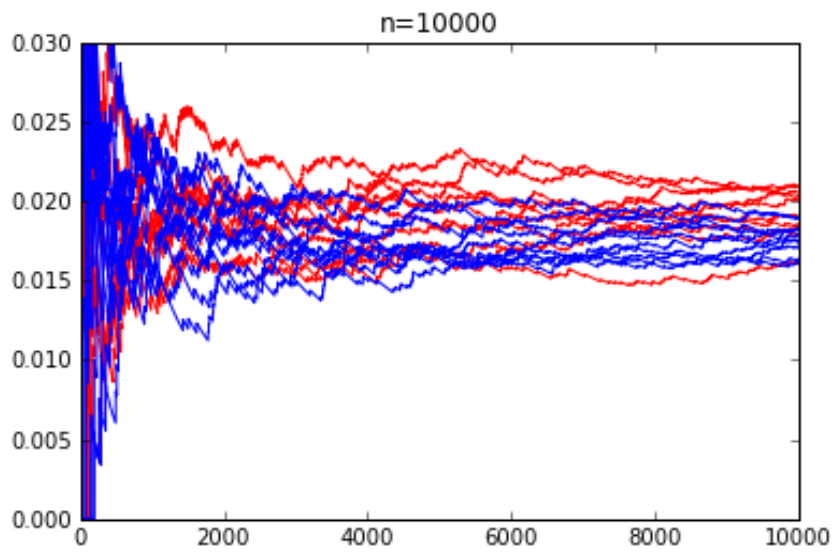
In [4]:
```
from random import random
from matplotlib.backends.backend_pdf import PdfPages
from pylab import *

# Create the PdfPages object to which we will save the pages:
pdf = PdfPages('averages.pdf')

n=10000; m=10
aver1=zeros((n,m))
for j in range(m):
    outcomes=[(1 if random()<0.02 else 0) for i in range(n)]
    c=cumsum(outcomes)
    aver1[:,j] = [c[i]/(i+1.0) for i in range(len(c))]

aver2=zeros((n,m))
for j in range(m):
    outcomes=[(1 if random()<0.0175 else 0) for i in range(n)]
    c=cumsum(outcomes)
    aver2[:,j] = [c[i]/(i+1.0) for i in range(len(c))]

plot(aver1,'r')
plot(aver2,'b')
ylim((0.0,0.03))

title('n='+str(n))
#savefig(pdf, format='pdf') # note the format='pdf' argument!
#close()
#pdf.close()
```

Out[4]: <matplotlib.text.Text at 0x109795ed0>



In [ ]: