Complex Network

Quiz 11

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Code

```
import matplotlib.pyplot as plt
from scipy import optimize, exp

x = range(500)
y = [0] * 500
for i in x:
  if i/100 <= 1:
    y[i] = 0
  else:
    y[i] = optimize.newton(lambda x: x-1+exp(-i/100*x), 1) #modify this part
plt.plot(list(map(lambda x: x * 0.01, x)), y)

plt.xlabel('Average degree c')
plt.ylabel('Size of giant component S')
```

Results

Draw a curve of the size of the giant component in a random graph.