Hao Wu Assignment2

1. Because the part of equation other than :

When N is large, this part are negligible, lower order terms could be ignored:

could be ignored comparing with

When N is small, we don’t care about the time

1. Java code is in Requirement2.java

1: constant

LogN : logarithmic

N: linear

NlogN : linearithmic

N^2:quadratic

N^3: cubic

2^N:exponential

Because this equation = when N is large could be discarded because it is lower-order term. When N is small, it doesn’t matter for It’s space complexity.

1. Because this equation is expressed by following code

for (int i=0;i<N;i++)

for(int j =i;j<N;j++)

for( int k =j;k<N;k++)

count++;

because = and when N is large the lower order terms could be ignored: could be ignored comparing with ,so the equation in question