CPS 430/590.06 Design and Analysis of Algorithms

Prof. John Reif Fall 2013

Question 1

From largest to smallest, the asymptotic size of the given functions are (with lg taken to represent log_2 and lg^{1000} taken to mean $(lg(n))^{1000}$):

$lg(n^{1000})$	(1)
$(lgn)^n$	(2)
n^{lgn}	(3)
n^{lglgn}	(4)
$(lgn)^{(lgn)}$	(5)
$lg^{1000}n$	(6)
n^2	(7)
nlgn	(8)
n	(9)
lgn	(10)
$n^{(1/lgn)}$	(11)
$(1+0.001)^n$	(12)
$lg_{1000}n$	(13)
1	(14)

- Question 2
- Question 3
- Question 4
- Question 5