**Computer Algorithms – HW1**

**1. Sort the following functions from asymptotically smallest to asymptotically largest,**

(a) 1 << log(n ^ n) << n choose 2(binomial coefficient) << n^3 + n^2 << n!

(b) 1/n << n^2^2 << n ^ log n << (log n) ^ n << 2^2^n

**Order considering all 10 functions together:**

1/n << 1 << log(n ^ n) << n choose 2(binomial coefficient) << n ^ 3 + n ^ 2 << n ^ 2 ^ 2

<< n ^ log n << (log n) ^ n << n! << 2 ^ 2^ n