Big O notations in order of increasing runtimes.

O(0)
O(2/N)
O(5)
O(log N)
O(SQRT(N))
O(N)
O(NM)
O(N Log N)
O(N^1.5)
O(N^2)
O(N^4)
O(2^N)
O(∞)

Complexity of the codes in HW document

1) t(n) = O(N)

2) t(n) = n(n)
   t(n) = O(N^2)

3)t(n) = n(n-m)
   t(n) = n^2 -nm
   t(n) = O(N^2)

4) t(n) = n^2(n^2)
   t(n) = n^4
  t(n) = O(N^4)