Snippet1:

-The first loop is O(n)

-the second loop is O(n^2)

n + n^2 = O(n^2)

Snippet2:

-the first loop runs has i = 4 and the second loop loops through the j which is i-3 and then the i increase by 1 so the nested loop will always loop four times so the complexity is:

4\*n = O(n)

Snippet3:

-the loop is on (lo+hi)/2 and each loop the the denominator (which is 2 in the first case) is multiplied by 2 so each loop the ‘x’ of (2^x) increases by 1 and n = (2^x) so the complexity is:

O(log(n))