1. ) This solution achieve O(N) time because it loops once each time

Code Highlight:

**for**(**int** i = 0; i < arraySize; i++)

{

**if**(a[i] == x)

{

System.***out***.println(x + " has been found at index " + i);

System.***out***.println(count + " compares");

}

count++;

}