

Source

History



```
1  package tarea2daa;
2
3  import java.util.List;
4
5  public class Tarea2DAA {
6
7      public static void main(String[] args) {
8          List<Integer> n = List.of(0,1,2,3,4,5,6,7,8,9);
9
10         System.out.println("Comparaciones: " + buscar(n, 9));
11     }
12
13     private static int buscar(List a, int b){
14         boolean encontrado = false;
15         int count = 0;
16         while(encontrado == false && count < a.size()){
17             if(b == (int)a.get(count)){
18                 encontrado = true;
19             }
20             count++;
21         }
22         return count;
23     }
24 }
25
```

Output - Tarea2DAA (run) ×



run:



Comparaciones: 10



BUILD SUCCESSFUL (total time: 0 seconds)

```
List<Integer> n = List.of(0,1,2,3,4,5,6,7,8,9); T(n)=n
```

```
    boolean encontrado = false; T(n)=1  
    int count = 0; T(n)=1  
    while(encontrado == false && count < a.size()){ T(n)=n  
        if(b == (int)a.get(count)){  
            encontrado = true; T(n)=1  
        }  
        count++; T(n)=1  
    }  
    return count;
```

$T(n) = n+1+1++n+1+1 = 2n+4$

```
List<Integer> n = List.of(0,1,2,3,4,5,6,7,8,9); S(n)=n
```

```
    boolean encontrado = false; S(n)=1  
    int count = 0; S(n)=1  
    while(encontrado == false && count < a.size()){  
        if(b == (int)a.get(count)){  
            encontrado = true;  
        }  
        count++; T(n)=1  
    }  
    return count;
```

$S(n)=n+1+1= n+2$