

```

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

```

```

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3 public class Main {
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```

Main x

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"C:\Users\HP PROBOOK 650 G3\.jdk\openjdk-23.0.2\bin\java.exe" "-javaagent:C:\Users\HP PROBOOK 650 G3\Documents\JetBr
Comparaciones realizadas = 10

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

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

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