

# CAJA BLANCA

```
public static int buscab(int[] vector, int valorabuscar) {
```

```
    int mitad, inferior = 0;
```

```
    int superior = vector.length - 1;
```

```
    contador = 0;
```

```
    do {
```

```
        contador++;
```

```
        mitad = (inferior + superior) >>> 1;
```

```
        if(valorabuscar > vector[mitad]) {
```

```
            inferior = mitad + 1;
```

```
        } else {
```

```
            superior = mitad - 1;
```

```
        }
```

```
    } while(vector[mitad] != valorabuscar && inferior <= superior);
```

```
    if(vector[mitad] == valorabuscar) {
```

```
        return mitad;
```

```
    } else {
```

```
        return -1;
```

```
    }
```

```
}
```

10

1

2

3

4

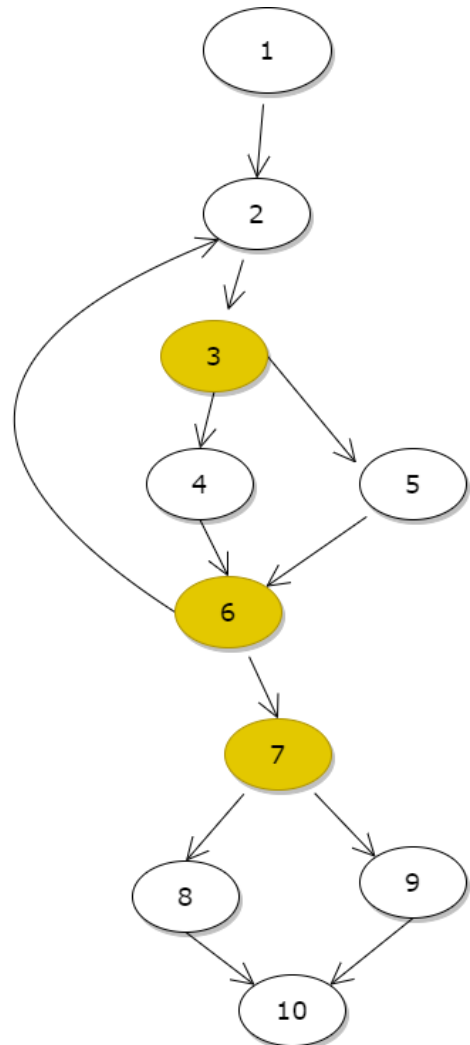
5

6

7

8

9



## Caminos básicos:

- 1,2,3,5,6,7,8,10
- 1,2,3,4,6,2,5,6,7,8,10
- 1,2,3,5,6,2,5,6,7,8,10
- 1,2,3,4,6,2,4,6,7,9,10

### Casos de prueba:

- primer camino: vector = [0,1,2] valorbuscar = 1
- segundo camino: vector = [0,1,2] valorbuscar = 2
- tercer camino: vector = [0,1,2] valorbuscar = 0
- cuarto camino vector = [0,1,2] valorbuscar = 3

### Complejidad ciclomática:

**V(G)=3:**

- El grafo mostrado anteriormente delimita cuatro regiones.
- $(12 \text{ aristas} - 10 \text{ nodos}) + 2 = 4$
- $3 \text{ nodos prediados} + 1 = 4$