

Searching for x in array tab

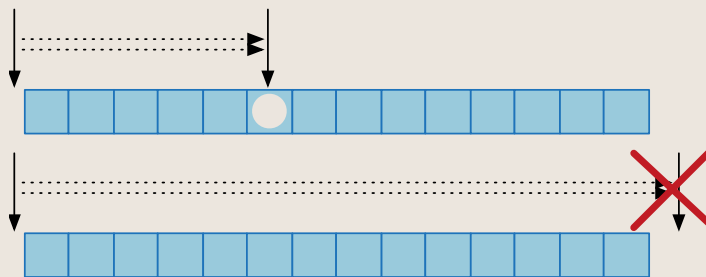
Without sentinel

```
i = 0;
```

```
while(i < tab.length && tab[i] != x)  
    i++;
```

```
if (i == tab.length || tab[i] != x)  
    StdOut.println("not found!");
```

```
else  
    StdOut.println("position: " + i);
```



index out of bounds!

WITHOUT sentinel

With sentinel

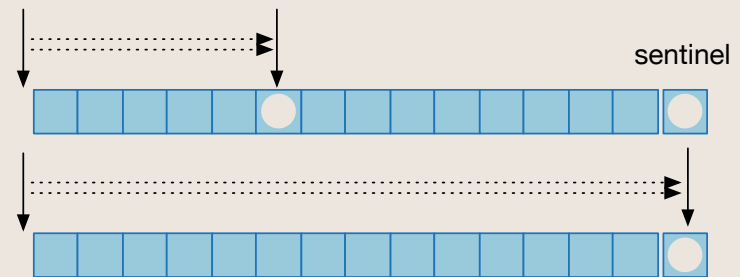
```
i = 0;
```

```
// place "x" at the end of table  
tab[N+1] = x;
```

```
while (tab[i] != x)  
    i++;
```

```
if (i == N+1)  
    StdOut.println("not found!");
```

```
else  
    StdOut.println("position: " + i);
```



WITH sentinel