

```
vector<int> prefixmin(n+1), suffixmin(n+1);
```

how u will represent this when compare to normal only n declaration

If you normally declare:

cpp

 Copy code

```
vector<int> v(n);
```

### Meaning:

- Size = `n`
- Valid indices = `0 ... n-1`

But when you write:

cpp

 Copy code

```
vector<int> prefixmin(n+1), suffixmin(n+1);
```

### ✓ Meaning

- Size = `n+1`
- Valid indices = `0 ... n`

### ✓ Why n+1?

Because you want **1-based indexing**, so:

- `prefixmin[1]` corresponds to element `1`
- `prefixmin[n]` corresponds to element `n`
- `prefixmin[0]` is kept unused (or sometimes used as a default value)

### ✓ Representation difference

Declaration	Size	Index range	Use-case
<code>vector&lt;int&gt; v(n);</code>	<code>n</code>	<code>0 ... n-1</code>	normal C++ indexing
<code>vector&lt;int&gt; v(n+1);</code>	<code>n+1</code>	<code>0 ... n</code>	1-based indexing

## ✓ Diagram

**Normal** ( `vector<int> v(n);` )

makefile

 Copy code

```
Index:   0   1   2   ...  n-1
Value:  [ ] [ ] [ ]   [   ]
```

**1-based** ( `vector<int> prefixmin(n+1);` )

yaml

 Copy code

```
Index:   0   1   2   ...   n
Value:  [X] [ ] [ ]       [ ]
        |
        unused
```

## ✓ Conclusion

Using `n+1` gives you **clean 1-based indexing**, which matches many CP problems and avoids writing `i-1` everywhere.

If you want, I can also show how to fill `prefixmin` and `suffixmin`.

