

# QGIS Application - Bug report #21192

## substr function in Select by Expression behaving strange

2019-02-06 10:55 PM - Richard Duivenvoorde

<b>Status:</b> Closed	
<b>Priority:</b> Normal	
<b>Assignee:</b>	
<b>Category:</b> Expressions	
<b>Affected QGIS version:</b> 3.5(master)	<b>Regression?:</b> No
<b>Operating System:</b>	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b>	<b>Copied to github as #:</b> 29010
<b>Description</b>	
<p>Having a set of points with a 'code' attribute consisting of a 2-char code+5digits I wanted to select all dutch points (starting with NL).</p> <p>Reading substr(string,start[,length]) I tried: eg: code = "NL1234"</p> <p>substring("code", 0, 2) =&gt; 'NL' then I thought to start on position 1 so did substring("code", 1, 2) =&gt; 'NL'</p> <p>I actually started questioning because I started of with substring("code", 0, 3) =&gt; 'NL' thinking it was from-till</p> <p>then tried substring("code", 0, 2) and also came to 'NL'</p> <p>So there are three ways to find the first 2 chars :-)</p> <p>Isn't this confusing? Should an expression not either be zero-based or one-based?</p> <p>We could argue that expressions are not for devs/coders so we deliberately choose for 1-based. But I think then we should put that in the Help text (so peeps like me should not try zero) and using zero then should work.</p> <p>But personally I would just prefer zero-based...Mmm, testing LibreOffice here, I see that using a zero as start actually returns an error)...</p> <p>So this is actually a feature?</p>	

### Associated revisions

#### Revision 2bed7ab0 - 2019-02-07 11:17 AM - Jürgen Fischer

fix substr help (fixes #21192)

#### Revision eb8e36c2 - 2019-02-08 12:30 AM - Jürgen Fischer

fix substr help (fixes #21192)

(cherry picked from commit 2bed7ab0018696dba76d2c8053d22633a271486e)

## History

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### #1 - 2019-02-07 01:05 AM - Jürgen Fischer

Not reproducible here:

```
substr('NL1234',0,2) => 'NL'  
substr('NL1234',1,2) => 'NL'  
substr('NL1234',0,3) => 'NL1'
```

### #2 - 2019-02-07 01:05 AM - Jürgen Fischer

- Status changed from Open to Feedback

### #3 - 2019-02-07 10:08 AM - Richard Duivenvoorde

Mmm, strange. So the last example I cannot reproduce here either.

But my point that it is not clear if it is zero based or one based is still valid:

```
substr('NL1234',0,2) => 'NL'  
substr('NL1234',1,2) => 'NL'
```

But we could consider this a 'feature'...

Problem would have been bigger if the second parameter would have been the end-stop instead of the length....

Close?

### #4 - 2019-02-07 11:17 AM - Jürgen Fischer

Richard Duivenvoorde wrote:

*Mmm, strange. So the last example I cannot reproduce here either.*

*But my point that it is not clear if it is zero based or one based is still valid:*

```
substr('NL1234',0,2) => 'NL'  
substr('NL1234',1,2) => 'NL'
```

*But we could consider this a 'feature'...*

*Problem would have been bigger if the second parameter would have been the end-stop instead of the length....*

*Close?*

The help doesn't say where the indexes start - but the examples show the current behavior (ie. index start at 1 - like in postgresql for instance; postgresql however produces an empty string on substring('NL1234',0,1) and 'N' on substring('NL1234',0,2)). Except

```
substr('HELLO WORLD',6) → 'WORLD'
```

**#5 - 2019-02-07 11:17 AM - Jürgen Fischer**

- % Done changed from 0 to 100

- Status changed from Feedback to Closed

Applied in changeset commit:qgis|2bed7ab0018696dba76d2c8053d22633a271486e.