



# Basic SemiXML tests

## Testing the basic use of SemiXML

### Introduction

SemiXML is a library which translates an equally named language into XML. There are several syntactic constructs which look very much the same as the XML language.

We need to write a convenience routine to call the parser several times from the tests. This way we keep the tests simple.

```
use SemiXML;

sub parse ( Str $content --> Str ) {

    state SemiXML::Sxml $x .= new;
    $x.parse(:$content);
    ~$x;
}
```

### Plain top level elements

First a few tests to generate top level elements

```
my $xml = parse('$st []');
is $xml, '<st/>', 'T0';
$xml = parse('$st [ abc ]');
is $xml, '<st>abc</st>', 'T1';
```

- ✓ T0: The element generated is <st/>.
- ✓ T1: The element generated is <st>abc</st>.

```
$xml = parse(Q:q@$st a1=w a2='g g' a3="h h" [ ]@);
like $xml, /'a1="w"/, 'T2';
like $xml, /'a2="g g"/, 'T3';
like $xml, /'a3="h h"/, 'T4';
dies-ok { $xml = parse('$st [ $f w [ ] hj ]'); }, 'T5';
```

- ✓ T2: a1="w" attribute
- ✓ T3: a2="g g" attribute
- ✓ T4: a3="h h" attribute
- ✓ T5: Elementary parse failures are trapped. Here the first attribute **w** to element **f** is unfinished. Unfortunately the location where the error exactly happens is not always accurate.

### Basic nesting

Nesting is done by specifying other tags in the body of a tag.

```
$xml = parse('$t1 [ $t2 [] $t3[]]');  
is $xml, '<t1><t2/><t3/></t1>', 'T6';
```

✓ **T6:** t2 and t3 are the nested tags

```
$xml = parse('$t1 [ $**t2 [] $t3[]]');  
is $xml, '<t1> <t2/> <t3/></t1>', 'T7';  
$xml = parse('$t1 [ $|*t2 [] $t3[]]');  
is $xml, '<t1><t2/> <t3/></t1>', 'T8';  
$xml = parse('$t1 [ $*|t2 [] $t3[]]');  
is $xml, '<t1> <t2/><t3/></t1>', 'T9';
```

✓ **T7:** nested tags with spaces around element t2 using \$\*\*

✓ **T8:** nested tags with a space on the right of t2 with \$|\*

✓ **T9:** nested tags with a space on the left of t2 done with \$\*|

Generated using SemiXML, SxmlLib::Testing::TestDoc, XML