

This file is a compilation of various uses of the listing boxes generated with `\ModifiedNewTCBListing` and `\ModifiedNewTCBInputListing`. In this way, robustness checks are performed to ensure they function correctly—as bug-free as possible.

Text.

1

Hello

- (a) `\arabic{code}: 1`
- (b) `\eqboxwidth{<tag>}`

`<tag>`

`codetitlewidth: 0pt`  
`codeupperwidth: 383.60588pt`  
`codelowerwidth: 0pt`
- (c) `\l__listings_autowidth_<component>_dim`

`<component>`

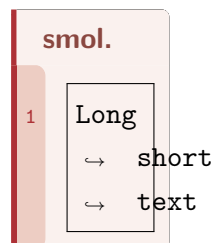
`title: 0.0pt`  
`upper: 0.0pt`  
`lower: 0.0pt`
- (d) `\g__listings_autowidth@core_measured_text_width_dim: 0.0pt`
- (e) `\g__listings_autowidth@core_measured_width_dim: 0.0pt`
- (f) `\g__listings_autowidth@core_max_tcb_text_width_dim: 0.0pt`
- (g) `\g__listings_autowidth@core_max_tcb_width_dim: 416.83289pt`

## 1.1 One Autowidth Option Selected

(a) autowidth = title

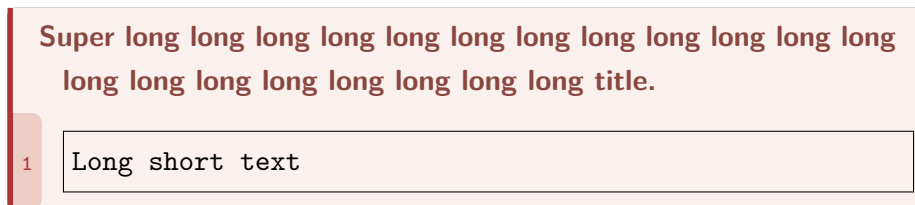
(i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_widt`

This box should be of width `\l__listings_autowidth_title_dim`

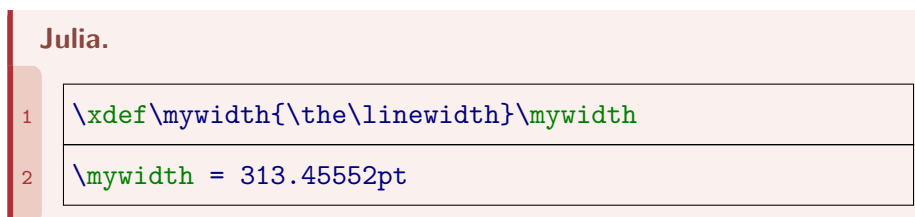


(ii) `\l_listings_autowidth_title_dim > \g_listings_autowidth@core_max_tcb_width`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width_dim`



(b) autowidth = upper



(i)

This should have breaklines disabled.

1

(ii)

This should have breaklines enabled.

1

(c) `autowidth = lower`

(i) `\l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the linewidth.

TeX.

1 Hello\\ hewwo \hspace{10cm} heh

-----  
Hello

hewwo

heh

(ii) `\l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the width of the `\tcblower`.

Long long long long long long long long  
long long long title.

1 Hello\\ hewwo \hspace{5cm} heh

-----  
Hello

hewwo

heh

(iii) `\l__listings_autowidth_lower_dim < \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to that of the `\tcblower`.

TeX.

Hello\\

↪ hewwo\\

↪ heh

-----  
Hello

hewwo

heh

## 1.2 Two Autowidth Options Selected

(a) `autowidth = title + upper`

(i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_width`

This box should be of width `\l__listings_autowidth_title_dim`

**smol.**

1

Long short text

(ii) `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width`

**Super long long long long long long long long long long long  
long long long long long long long long title.**

1

Long short text

(iii) i.

**Julia.**

1

`\xdef\mywidth{\the\linewidth}\mywidth`

2

`\mywidth = 289.9374pt`

ii.

**This should have one line.**

1

**This should also have breaklines disabled (But the title should break).**

1

iii.

**This should have breaklines enabled.**

1

↪

This should have one broken line (some extra text) (But the title should break).

1

↩

(b) `autowidth = title + lower`

(i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_width`

This box should be of width `\l__listings_autowidth_title_dim`

smol.

1

Long short text

(ii) `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width`

Super long long long long long long long long long long long long long long long long long title.

1

Long short text

(iii) `\l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the linewidth.

TeX.

1

Hello\\ hewwo \hspace{10cm} heh

Hello

hewwo

heh

(iv) `\l__listings_autowidth_title_dim >= \l__listings_autowidth_lower_dim`  
`>= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the width of the title

Long long long long long long long long long title.

1

Hello\\ hewwo \hspace{5cm} heh

Hello

hewwo

heh

(v) `\l__listings_autowidth_lower_dim < \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to that of the `\tcblower`.

**T<sub>E</sub>X.**

Hello\\  
 ↪ hewwo\\  
 ↪ heh

-----  
 Hello  
 hewwo  
 heh

(c) autowidth = upper + lower

**Julia.**

```
1 \xdef\mywidth{\the\linewidth}\mywidth
2 \mywidth = 310.41388pt
```

(i)

**This should have breaklines disabled.**

```
1 \hspace{\mywidth}
```

(ii)

**This should have breaklines enabled.**

```
1 \hspace{\mywidth+0.00001pt}
```

(iii) `\l__listings_autowidth_lower_dim >= \l__listings_autowidth_upper_dim`

The following box should have width equal to the linewidth.

**T<sub>E</sub>X.**

```
1 Hello\\ hewwo \hspace{10cm} heh
```

-----  
 Hello  
 hewwo

heh

(iv) `\l__listings_autowidth_lower_dim >= \l__listings_autowidth_upper_dim`

The following box should have width equal to the width of the `\tcblower`

Long long long long long long long long  
long long long title.

1

Hello\\ hewwo \\hspace{5cm} heh

Hello

hewwo

heh

(v) `\l__listings_autowidth_lower_dim < \l__listings_autowidth_upper_dim`

The following box should have width equal to that of the the width of the upper.

**T<sub>E</sub>X.**

Hello\\ hewwo\\ heh

Hello

hewwo

heh

### 1.3 (All) Three Autowidth Options Selected

(a) `\l__listings_autowidth_upper_dim >= \l__listings_autowidth_⟨title, lower⟩_dim`

This box should be of width `\l__listings_autowidth_upper_dim`

**smol.**

1

Long short text

Long short text

(b) `\l__listings_autowidth_lower_dim >= \l__listings_autowidth_⟨title, upper⟩_dim`

This box should be of width `\l__listings_autowidth_lower_dim`

**smol.**

1

\\hspace{10cm}

(c) `\l__listings_autowidth_title_dim >= \l__listings_autowidth_⟨upper, lower⟩_dim`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width_dim`

Super long long long long long long long long long title.

1

Long short text\\

2

Test \\hspace{8.5cm} testo

Long short text

Test

testo

(d) `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width_dim`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width_dim`

**Super long long long long long long long long long long long long  
long long long long long long long title.**

1	Long short text\\
---	-------------------

2 Test \hspace{10cm} testo

Long short text

Test

testo

(e)

**Julia.**

```
1 \xdef\mywidth{\the\linewidth}\mywidth
```

```
2 \mywidth = 348.53072pt
```

This should have breaklines disabled.

```
1 \hspace{\mywidth}
```

(f)

This should have breaklines enabled.

```
1 \hspace{\mywidth+0.00001pt}
```

Text.

1 test

(a) `\arabic{code}`: 35

(b) `\eqboxwidth{<tag>}`

<tag>

codetitlewidth: 0pt

codeupperwidth: 22.99493pt \_\_\_\_

code lowerwidth: 0pt

(c) `\l__listings_autowidth_⟨component⟩_dim`

<component>

title: 0.0pt



upper: 22.99493pt —

lower: 0.0pt

(d) `\g__listings_autowidth@core_measured_text_width_dim`: 22.99493pt

(e) `\g__listings_autowidth@core_measured_width_dim`: 56.22194pt

(f) `\g__listings_autowidth@core_max_tcb_text_width_dim`: 383.60588pt

(g) `\g__listings_autowidth@core_max_tcb_width_dim`: 416.83289pt

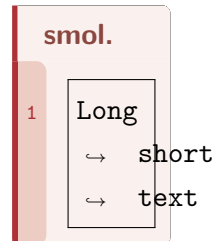
## ModifiedNewTCBInputListing

### 2.1 One Autowidth Option Selected

(a) `autowidth = title`

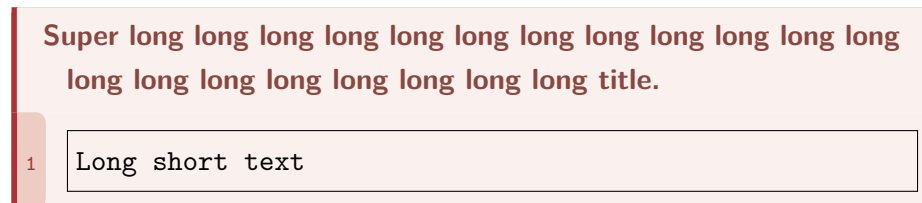
(i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_width`

This box should be of width `\l__listings_autowidth_title_dim`

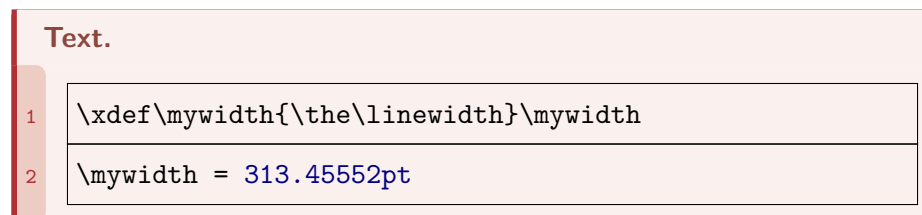


(ii) `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width_dim`




(b) `autowidth = upper`



(i)

This should have breaklines disabled.

1 

(ii)

This should have breaklines enabled.

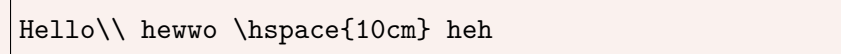
1 

(c) `autowidth = lower`

(i) `\l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the linewidth.

Text.

1 

Hello

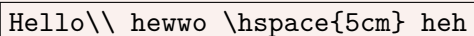
hewwo

heh

(ii) `\l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the width of the `\tcblower`

Long long long long long long long long  
long long long title.

1 

Hello

hewwo

heh

(iii) `\l__listings_autowidth_lower_dim < \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to that of the `\tcblower`.

Text.

Hello\\

↵ hewwo\\

↵ heh

Hello

hewwo

heh

## 2.2 Two Autowidth Options Selected

(a) `autowidth = title + upper`

- (i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_width`

This box should be of width `\l__listings_autowidth_title_dim`

**smol.**

1 Long short text

- (ii) `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width`

**Super long long long long long long long long long long long long long long long long long long title.**

1 Long short text

- (iii) i.

**Text.**

1 `\xdef\mywidth{\the\linewidth}\mywidth`

2 `\mywidth = 289.9374pt`

- ii.

**This should have one line.**

1

**This should also have breaklines disabled (But the title should break).**

1

- iii.

**This should have breaklines enabled.**

1

↪

**This should have one broken line (some extra text) (But the title should break).**

1

↪

(b) `autowidth = title + lower`

- (i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_width`

This box should be of width `\l__listings_autowidth_title_dim`

**smol.**

1 Long short text

- (ii) `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width_dim`

**Super long long long long long long long long long long long long long long long long long long title.**

1 Long short text

- (iii) `\l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the linewidth.

**Text.**

1 Hello\\ hewwo \hspace{10cm} heh

---

Hello  
hewwo heh

- (iv) `\l__listings_autowidth_title_dim >= \l__listings_autowidth_lower_dim`  
`>= \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to the width of the title

**Long long long long long long long long long title.**

1 Hello\\ hewwo \hspace{5cm} heh

---

Hello  
hewwo heh

- (v) `\l__listings_autowidth_lower_dim < \eqboxwidth{codeupperwidth\arabic{code}}`

The following box should have width equal to that of the `\tcblower`.

**Text.**

Hello\\  
↪ hewwo\\  
↪ heh

---

Hello  
hewwo  
heh

(c) autowidth = upper + lower

**Text.**

```
1 \xdef\mywidth{\the\linewidth}\mywidth
2 \mywidth = 310.41388pt
```

(i)

**This should have breaklines disabled.**

```
1 \hspace{\mywidth}
```

(ii)

**This should have breaklines enabled.**

```
1 \hspace{\mywidth+0.00001pt}
```

(iii) `\l__listings_autowidth_lower_dim >= \l__listings_autowidth_upper_dim`

The following box should have width equal to the linewidth.

**Text.**

```
1 Hello\\ hewwo \hspace{10cm} heh
```

Hello

hewwo

heh

(iv) `\l__listings_autowidth_lower_dim >= \l__listings_autowidth_upper_dim`

The following box should have width equal to the width of the `\tcblower`

**Long long long long long long long long  
long long long title.**

```
1 Hello\\ hewwo \hspace{5cm} heh
```

Hello

hewwo

heh

(v) `\l__listings_autowidth_lower_dim < \l__listings_autowidth_upper_dim`

The following box should have width equal to that of the the width of the upper.

**Text.**

Hello\\ hewwo\\ heh

Hello

hewwo

heh

**2.3 (All) Three Autowidth Options Selected**

- (a)
- `\l__listings_autowidth_upper_dim >= \l__listings_autowidth_<title, lower>_dim`

This box should be of width `\l__listings_autowidth_upper_dim`**smol.**

1

Long short text

Long short text

- (b)
- `\l__listings_autowidth_lower_dim >= \l__listings_autowidth_<title, upper>_dim`

This box should be of width `\l__listings_autowidth_lower_dim`**smol.**

1

\hspace{10cm}

- (c)
- `\l__listings_autowidth_title_dim >= \l__listings_autowidth_<upper, lower>_dim`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width_dim`**Super long long long long long long long long long long title.**

1

Long short text\\

2

Test \hspace{8.5cm} testo

Long short text

Test

testo

- (d)
- `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width_dim`

This title should break and be of width `\g__listings_autowidth@core_max_tcb_width_dim`**Super long long long long long long long long long long long long long long long long title.**

1

Long short text\\

2

Test \hspace{10cm} testo

Long short text

Test

testo

(e)

**Text.**

```
1 \xdef\mywidth{\the\linewidth}\mywidth
```

```
2 \mywidth = 348.53072pt
```

**This should have breaklines disabled.**

```
1 \hspace{\mywidth}
```

(f)

**This should have breaklines enabled.**

```
1 \hspace{\mywidth+0.00001pt}
```