

Last successful compile: 2025-09-14 16:57:23+08:00

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`

```

graph LR
    A[smol.] -- contains --> B[1]
    B -- contains --> C[Long]
    C -- contains --> D[↪ short]
    C -- contains --> E[↪ 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`

[illegible]


(b) autowidth = upper

**Julia.**

```
1 \xdef\mywidth{\the\linewidth}\mywidth
2 \mywidth = 313.45552pt
```

(i)

This should have breaklines disabled.

1 

(ii)

This should have breaklines enabled.

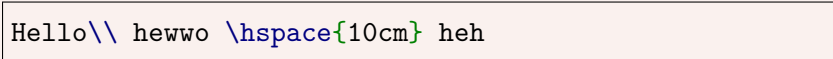
1 

(c) `autowidth = lower`

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

The following box should have width equal to the linewidth.

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

1 

Hello

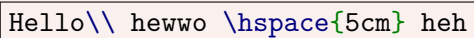
hewwo

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

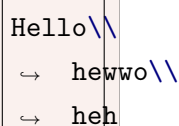
hewwo

heh

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

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

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

1 

Hello

hewwo

heh

(iv) The following box should compile

**TeX.**

```
1 \centering
2 Hello \hspace{5cm} there\\
3 I
```

Hello I there

## 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 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_dim`

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.

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

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

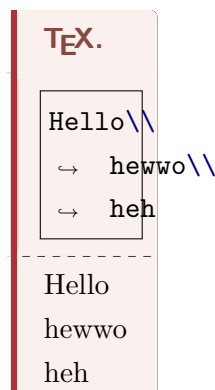
Hello

hewwo

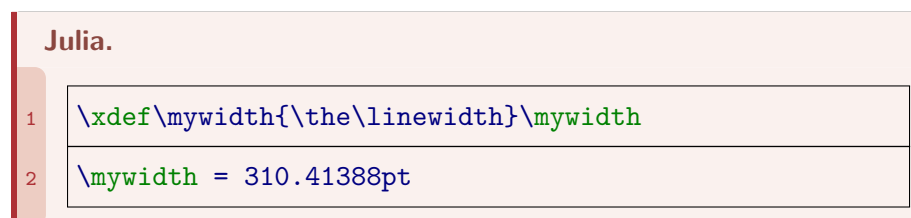
heh

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

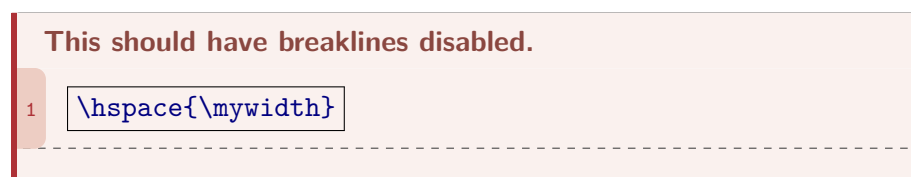
The following box should have width equal to that of the `\tcblower`.



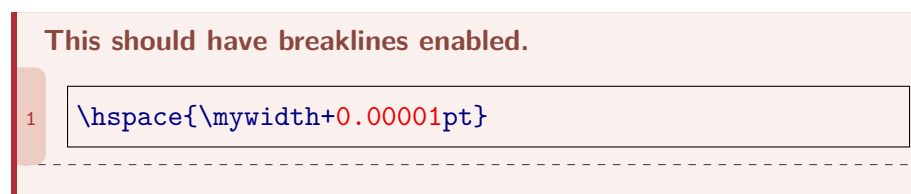
(c) `autowidth = upper + lower`, listing and text



(i)

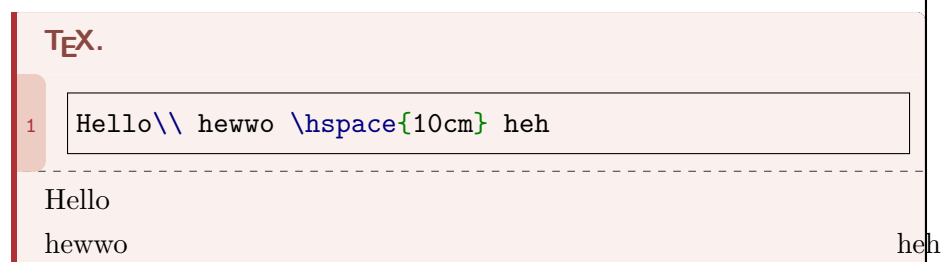


(ii)



(iii) `\l__listings_autowidth_lower_dim >= \l__listings_autowidth_upper_dim`

The following box should have width equal to the linewidth.



(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.

TeX.

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 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}`: 36

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

<tag>

codetitlewidth: 0pt

codeupperwidth: 22.99493pt

codelowerwidth: 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

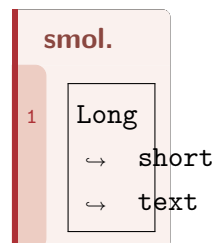
## ModifiedNewTCBInputListing

### 2.1 One Autowidth Option Selected

(a) `autowidth = title`

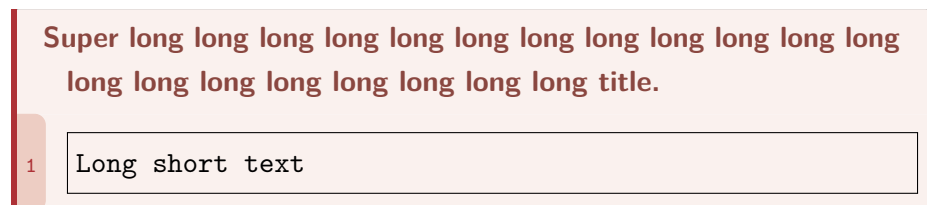
(i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_widt`

This box should be of width `\l__listings_autowidth_title_dim`

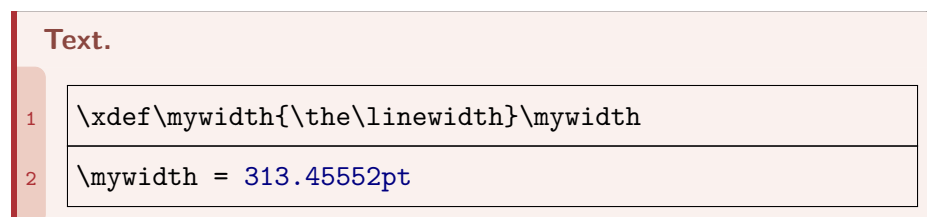


(ii) `\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_width`

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.

Text.

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`.

Text.

Hello\\

↪ hewwo\\

↪ heh

Hello

hewwo

heh

(iv) The following box should compile

Text.

1 \centering

2 Hello \hspace{5cm} there\\

3	I
---	---

Hello

I

there

## 2.2 Two Autowidth Options Selected

(a) `autowidth = title + upper`

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

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 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 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, listing and text

**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 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 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}