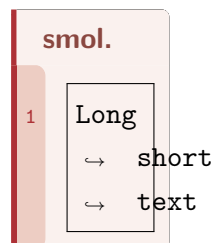This file is a compilation of various uses of the listing boxes generated with `\ModifiedNewTCBListing` and `\ModifiedNewTCBInputListing`. In this way, robustness checks are performed to ensure they function correctly—as bug-free as possible.

ModifiedNewTCBListing

1.1 One Autowidth Option Selected

(a) `autowidth = title`
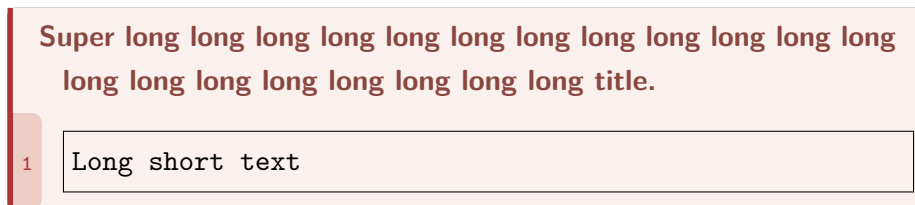
    (i) `\l__listings_autowidth_title_dim <= \g__listings_autowidth@core_max_tcb_widt`

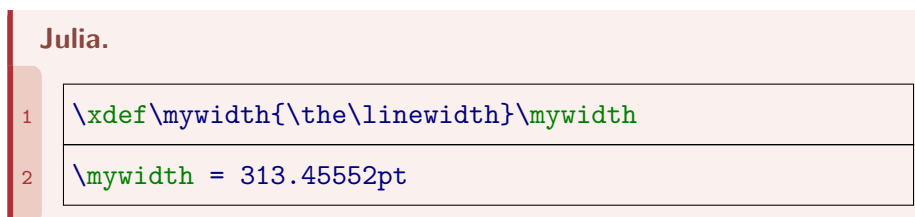   This box should be of width `\l__listings_autowidth_title_dim`

<div align="center">

smol.

```
1 │ Long
    ↪   short
    ↪   text
```

</div>

    (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 long title.

```
1 │ Long short text
```

(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_EX.

```
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`.

T_EX.

```
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_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`

    (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_widt**

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) **\l__listings_autowidth_lower_dim** >= **\eqboxwidth{**codeupperwidth**\arabic{**code**}**

The following box should have width equal to the linewidth.

T$_E$X.

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

Hello
hewwo   heh

(iv) **\l__listings_autowidth_title_dim** >= **\l__listings_autowidth_lower_dim**
>= **\eqboxwidth{**codeupperwidth**\arabic{**co

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**.

TEX.

```
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.

TEX.

```
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_EX.**
>
> ```
> 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 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 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}**: 34

(b) **\eqboxwidth{⟨tag⟩}**

⟨tag⟩

codetitlewidth: 0pt

codeupperwidth: 393.60461pt

codelowerwidth: 0pt

(c) **\l__listings_autowidth_⟨component⟩_dim**

⟨component⟩

title: 0.0pt

upper: 393.60461pt

```
     lower:     0.0pt
```

(d) `\g__listings_autowidth@core_measured_text_width_dim`: 393.60461pt

(e) `\g__listings_autowidth@core_measured_width_dim`: 426.83162pt

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

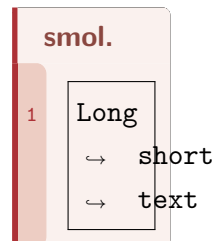(g) `\g__listings_autowidth@core_max_tcb_width_dim`: 416.83289pt

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`

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 long title.**
>
> ```
> 1   Long short text
> ```

(b) `autowidth = upper`

> **Text.**
>
> ```
> 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.

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

2.2 Two Autowidth Options Selected

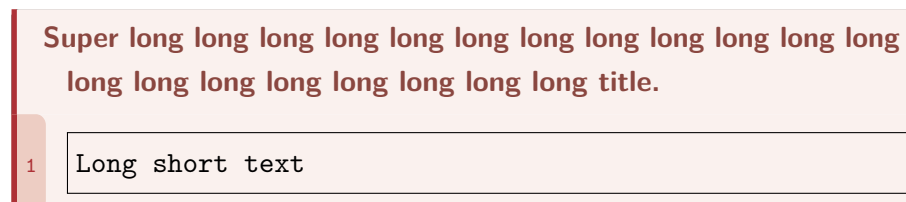(a) `autowidth = title + upper`

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

    This box should be of width **`\l__listings_autowidth_title_dim`**

> **smol.**
>
> | | |
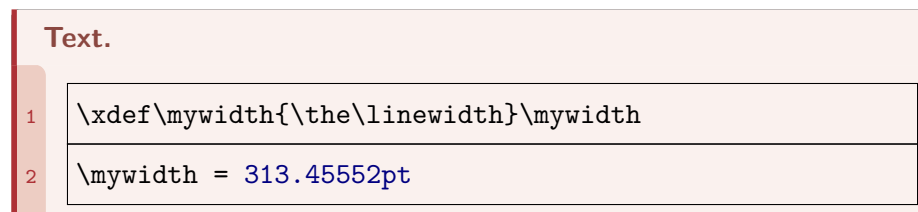> |---|---|
> | 1 | `Long short text` |

    (ii) **`\l__listings_autowidth_title_dim > \g__listings_autowidth@core_max_tcb_widt`**

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

> **Super long 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_widt`**

     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 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{co`

     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 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 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}
```