Ninecolors: Select Colors with Proper WCAG Color Contrast*

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Version 2022D (2022-02-13)

1 LaTeX2 Colors with Medium Saturation

Ninecolors package carefully selects and defines 9 colors for 13 hues each. All colors with the same suffix number have equal luminance level. Also color black is of level 0, and color white is of level 10.

gray1	red1	brown1	yellow1	olive1	green1	teal1	cyan1	azure1	blue1	violet1	magenta1	purple1
gray2	red2	brown2	yellow2	olive2	green2	teal2	cyan2	azure2	blue2	violet2	magenta2	purple2
gray3	red3	brown3	yellow3	olive3	green3	teal3	cyan3	azure3	blue3	violet3	magenta3	purple3
gray4	red4	brown4	yellow4	olive4	green4	teal4	cyan4	azure4	blue4	violet4	magenta4	purple4
gray5	red5	brown5	yellow5	olive5	green5	teal5	cyan5	azure5	blue5	violet5	magenta5	purple5
gray6	red6	brown6	yellow6	olive6	green6	teal6	cyan6	azure6	blue6	violet6	magenta6	purple6
gray7	red7	brown7	yellow7	olive7	green7	teal7	cyan7	azure7	blue7	violet7	magenta7	purple7
gray8	red8	brown8	yellow8	olive8	green8	teal8	cyan8	azure8	blue8	violet8	magenta8	purple8
gray9	red9	brown9	yellow9	olive9	green9	teal9	cyan9	azure9	blue9	violet9	magenta9	purple9

gray1	red1	brown1	yellow1	olive1	green1	teal1	cyan1	azure1	blue1	violet1	magenta1	purple1
gray2	red2	brown2	yellow2	olive2	green2	teal2	cyan2	azure2	blue2	violet2	magenta2	purple2
gray3	red3	brown3	yellow3	olive3	green3	teal3	cyan3	azure3	blue3	violet3	magenta3	purple3
gray4	red4	brown4	yellow4	olive4	green4	teal4	cyan4	azure4	blue4	violet4	magenta4	purple4
gray5	red5	brown5	yellow5	olive5	green5	teal5	cyan5	azure5	blue5	violet5	magenta5	purple5
gray6	red6	brown6	yellow6	olive6	green6	teal6	cyan6	azure6	blue6	violet6	magenta6	purple6
gray7	red7	brown7	yellow7	olive7	green7	teal7	cyan7	azure7	blue7	violet7	magenta7	purple7
gray8	red8	brown8	yellow8	olive8	green8	teal8	cyan8	azure8	blue8	violet8	magenta8	purple8
gray9	red9	brown9	yellow9	olive9	green9	teal9	cyan9	azure9	blue9	violet9	magenta9	purple9

By simply choosing two colors in the above list, which differ in level by at least 5, as foreground and background colors, you will get proper WCAG Color Contrast.
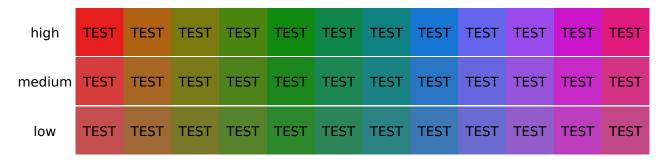
The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog.
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If you need to select more contrasting foreground and background colors, which may have other hues, you could visit WCAG Color Contrast Tool page which is designed by the first author.

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*https://github.com/lvjr/ninecolors

2 LaTeX2 Colors with Low Saturation

You can change the saturation of colors by `\NineColors` command. By default `saturation=medium`.

high	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST
medium	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST
low	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST

Colors in the remaining part of the page have been changed by `\NineColors{saturation=low}`.

Ninecolors package carefully selects and defines 9 colors for 13 hues each. All colors with the same suffix number have equal luminance level. Also color black is of level 0, and color white is of level 10.

gray1	red1	brown1	yellow1	olive1	green1	teal1	cyan1	azure1	blue1	violet1	magenta1	purple1
gray2	red2	brown2	yellow2	olive2	green2	teal2	cyan2	azure2	blue2	violet2	magenta2	purple2
gray3	red3	brown3	yellow3	olive3	green3	teal3	cyan3	azure3	blue3	violet3	magenta3	purple3
gray4	red4	brown4	yellow4	olive4	green4	teal4	cyan4	azure4	blue4	violet4	magenta4	purple4
gray5	red5	brown5	yellow5	olive5	green5	teal5	cyan5	azure5	blue5	violet5	magenta5	purple5
gray6	red6	brown6	yellow6	olive6	green6	teal6	cyan6	azure6	blue6	violet6	magenta6	purple6
gray7	red7	brown7	yellow7	olive7	green7	teal7	cyan7	azure7	blue7	violet7	magenta7	purple7
gray8	red8	brown8	yellow8	olive8	green8	teal8	cyan8	azure8	blue8	violet8	magenta8	purple8
gray9	red9	brown9	yellow9	olive9	green9	teal9	cyan9	azure9	blue9	violet9	magenta9	purple9

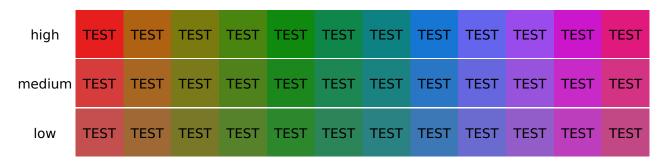| gray1	red1	brown1	yellow1	olive1	green1	teal1	cyan1	azure1	blue1	violet1	magenta1	purple1
gray2	red2	brown2	yellow2	olive2	green2	teal2	cyan2	azure2	blue2	violet2	magenta2	purple2
gray3	red3	brown3	yellow3	olive3	green3	teal3	cyan3	azure3	blue3	violet3	magenta3	purple3
gray4	red4	brown4	yellow4	olive4	green4	teal4	cyan4	azure4	blue4	violet4	magenta4	purple4
gray5	red5	brown5	yellow5	olive5	green5	teal5	cyan5	azure5	blue5	violet5	magenta5	purple5
gray6	red6	brown6	yellow6	olive6	green6	teal6	cyan6	azure6	blue6	violet6	magenta6	purple6
gray7	red7	brown7	yellow7	olive7	green7	teal7	cyan7	azure7	blue7	violet7	magenta7	purple7
gray8	red8	brown8	yellow8	olive8	green8	teal8	cyan8	azure8	blue8	violet8	magenta8	purple8
gray9	red9	brown9	yellow9	olive9	green9	teal9	cyan9	azure9	blue9	violet9	magenta9	purple9

By simply choosing two colors in the above list, which differ in level by at least 5, as foreground and background colors, you will get proper WCAG Color Contrast.

The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog.
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3 LaTeX2 Colors with High Saturation

You can change the saturation of colors by `\NineColors` command. By default `saturation=medium`.

high	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST
medium	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST
low	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST	TEST

Colors in the remaining part of the page have been changed by `\NineColors{saturation=high}`.

Ninecolors package carefully selects and defines 9 colors for 13 hues each. All colors with the same suffix number have equal luminance level. Also color black is of level 0, and color white is of level 10.

gray1	red1	brown1	yellow1	olive1	green1	teal1	cyan1	azure1	blue1	violet1	magenta1	purple1
gray2	red2	brown2	yellow2	olive2	green2	teal2	cyan2	azure2	blue2	violet2	magenta2	purple2
gray3	red3	brown3	yellow3	olive3	green3	teal3	cyan3	azure3	blue3	violet3	magenta3	purple3
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gray1	red1	brown1	yellow1	olive1	green1	teal1	cyan1	azure1	blue1	violet1	magenta1	purple1
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gray9	red9	brown9	yellow9	olive9	green9	teal9	cyan9	azure9	blue9	violet9	magenta9	purple9

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4 LaTeX3 Colors for Fun

If you are using a LaTeX3 release not older than 2021-07-12, Ninecolors package will define LaTeX3 colors of the same names for you.

For example, you can change the color of drawing operations by `\color_fill:n {color expression}` command for fills, `\color_stroke:n {color expression}` command for strokes.