
colorpalette Documentation

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colorpalette is an object oriented extension of the [ansicolors package](#). It features Color objects that color strings when called.

1.1 Color: Color strings based on the `ansicolors` package.

Create a color by ID:

```
[1]: from colorpalette import *  
     green = Color('forestgreen')  
     green  
  
forestgreen
```

Color a string:

```
[2]: print(green('This is green'))  
  
This is green
```

Colors can also be concatenated. Add `Color.reset`, to remove the color code in later strings

```
[3]: print(green + 'This is green' + Color.reset + '\nThis is normal')  
  
This is green  
This is normal
```

You can also create a color passing the foreground color (`fg`), background color (`bg`), `style`, and define them with an ID.

```
[4]: green_lavender = Color(fg='forestgreen', bg='lavenderblush', style='underline', ID=  
     ↪ 'green_lavender')  
     green_lavender  
  
green_lavender
```

Note: Please refer to the color function in the [ansicolors package](#) for further details on these parameters:

All colors with an ID are saved in 'cached':

```
[5]: Color.cached
```

```
[5]: {'aliceblue': [38;2;240;248;255maliceblue[0m,
'antiquewhite': [38;2;250;235;215mantiqueewhite[0m,
'aqua': [38;2;0;255;255maqua[0m,
'aquamarine': [38;2;127;255;212maquamarine[0m,
'azure': [38;2;240;255;255mazure[0m,
'beige': [38;2;245;245;220mbeige[0m,
'bisque': [38;2;255;228;196mbisque[0m,
'black': [30mblack[0m,
'blanchedalmond': [38;2;255;235;205mblanchedalmond[0m,
'blue': [34mblue[0m,
'blueviolet': [38;2;138;43;226mblueviolet[0m,
'brown': [38;2;165;42;42mbrown[0m,
'burlywood': [38;2;222;184;135mburlywood[0m,
'cadetblue': [38;2;95;158;160mcadetblue[0m,
'chartreuse': [38;2;127;255;0mchartreuse[0m,
'chocolate': [38;2;210;105;30mchocolate[0m,
'coral': [38;2;255;127;80mcoral[0m,
'cornflowerblue': [38;2;100;149;237mcornflowerblue[0m,
'cornsilk': [38;2;255;248;220mcornsilk[0m,
'crimson': [38;2;220;20;60mcrimson[0m,
'cyan': [36mcyan[0m,
'darkblue': [38;2;0;0;139mdarkblue[0m,
'darkcyan': [38;2;0;139;139mdarkcyan[0m,
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'darkgray': [38;2;169;169;169mdarkgray[0m,
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'darkslategray': [38;2;47;79;79mdarkslategray[0m,
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'darkviolet': [38;2;148;0;211mdarkviolet[0m,
'deeppink': [38;2;255;20;147mdeeppink[0m,
'deepskyblue': [38;2;0;191;255mdeepskyblue[0m,
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'forestgreen': [38;2;34;139;34mforestgreen[0m,
'fuchsia': [38;2;255;0;255mfuchsia[0m,
'gainsboro': [38;2;220;220;220mgainsboro[0m,
'ghostwhite': [38;2;248;248;255mghostwhite[0m,
'gold': [38;2;255;215;0mgold[0m,
'goldenrod': [38;2;218;165;32mgoldenrod[0m,
'gray': [38;2;128;128;128mgray[0m,
'green': [32mgreen[0m,
'greenyellow': [38;2;173;255;47mgreenyellow[0m,
```

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```

'grey': [38;2;128;128;128mgrey[0m,
'honeydew': [38;2;240;255;240mhoneydew[0m,
'hotpink': [38;2;255;105;180mhotpink[0m,
'indianred': [38;2;205;92;92mindianred[0m,
'indigo': [38;2;75;0;130mindigo[0m,
'ivory': [38;2;255;255;240mivory[0m,
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'lavender': [38;2;230;230;250mlavender[0m,
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'lawnngreen': [38;2;124;252;0mlawnngreen[0m,
'lemonchiffon': [38;2;255;250;205mlemonchiffon[0m,
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'lightgreen': [38;2;144;238;144mlightgreen[0m,
'lightgrey': [38;2;211;211;211mlightgrey[0m,
'lightpink': [38;2;255;182;193mlightpink[0m,
'lightsalmon': [38;2;255;160;122mlightsalmon[0m,
'lightseagreen': [38;2;32;178;170mlightseagreen[0m,
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'lightsteelblue': [38;2;176;196;222mlightsteelblue[0m,
'lightyellow': [38;2;255;255;224mlightyellow[0m,
'lime': [38;2;0;255;0mlime[0m,
'limegreen': [38;2;50;205;50mlimegreen[0m,
'linen': [38;2;250;240;230mlinen[0m,
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'mediumaquamarine': [38;2;102;205;170mmediumaquamarine[0m,
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'orangered': [38;2;255;69;0morangered[0m,
'orchid': [38;2;218;112;214morchid[0m,
'palegoldenrod': [38;2;238;232;170mpalegoldenrod[0m,
'palegreen': [38;2;152;251;152mpalegreen[0m,
'paleturquoise': [38;2;175;238;238mpaleturquoise[0m,
'palevioletred': [38;2;219;112;147mpalevioletred[0m,
'papayawhip': [38;2;255;239;213mpapayawhip[0m,

```

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```
'peachpuff': [38;2;255;218;185mpeachpuff[0m,
'peru': [38;2;205;133;63mperu[0m,
'pink': [38;2;255;192;203mpink[0m,
'plum': [38;2;221;160;221mplum[0m,
'powderblue': [38;2;176;224;230mpowderblue[0m,
'purple': [38;2;128;0;128mpurple[0m,
'rebeccapurple': [38;2;102;51;153mrebeccapurple[0m,
'red': [31mred[0m,
'rosybrown': [38;2;188;143;143mrosybrown[0m,
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'salmon': [38;2;250;128;114msalmon[0m,
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'seagreen': [38;2;46;139;87mseagreen[0m,
'seashell': [38;2;255;245;238mseashell[0m,
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'skyblue': [38;2;135;206;235mskyblue[0m,
'slateblue': [38;2;106;90;205mslateblue[0m,
'slategray': [38;2;112;128;144mslategray[0m,
'slategrey': [38;2;112;128;144mslategrey[0m,
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'teal': [38;2;0;128;128mteal[0m,
'thistle': [38;2;216;191;216mthistle[0m,
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'turquoise': [38;2;64;224;208mturquoise[0m,
'violet': [38;2;238;130;238mviolet[0m,
'wheat': [38;2;245;222;179mwheat[0m,
'white': [37mwhite[0m,
'whitesmoke': [38;2;245;245;245mwhitesmoke[0m,
'yellow': [33myellow[0m,
'yellowgreen': [38;2;154;205;50myellowgreen[0m,
'reset': [0mreset[0m,
'green_lavender': [38;2;34;139;34;48;2;255;240;245;4mgreen_lavender[0m}
```

Get RGB or HEX of the Color object:

```
[6]: # Foreground color (RGB)
green_lavender.RGB
```

```
[6]: array([ 34., 139.,  34.])
```

```
[7]: # Foreground color (normalized RGB)
green_lavender.RGBn
```

```
[7]: array([0.13333333, 0.54509804, 0.13333333])
```

```
[8]: # Background color (RGB)
green_lavender.RGB_bg
```

```
[8]: array([255., 240., 245.])
```

```
[9]: # Background color (normalized RGB)
green_lavender.RGBn_bg
```

```
[9]: array([1.          , 0.94117647, 0.96078431])
```

```
[10]: # Foreground color (HEX)
      green_lavender.HEX
```

```
[10]: '#228b22'
```

```
[11]: # Background color (HEX)
      green_lavender.HEX_bg
```

```
[11]: '#fff0f5'
```

Get tints and shades of the Color object:

```
[12]: green_lavender.tint(25) # 25% tint
```

```
25% tinted green_lavender
```

```
[13]: green_lavender.shade(25) # 25% shade
```

```
25% shaded green_lavender
```

1.2 Palette: Iterable set of named Color objects.

Create a Palette object with key/Color pairs:

```
[14]: color_scheme = Palette(string=green, emphasis=green_lavender, warning=Color('red'))
      color_scheme
```

```
Palette(string, emphasis, warning)
```

All Color objects are attributes:

```
[15]: color_scheme.string, color_scheme.emphasis, color_scheme.warning
```

```
[15]: ([38;2;34;139;34mforestgreen[0m,
      [38;2;34;139;34;48;2;255;240;245;4mgreen_lavender[0m,
      [31mred[0m)
```

Palette objects are iterable:

```
[16]: for color in color_scheme:
      print(color('Test'))
```

```
Test
Test
Test
```


class colorpalette.**Palette** (***colors*)

Create a Palette object that manages Color objects.

Parameters

****colors:** Key/Color pairs to initialize attributes.

Examples:

Getting Started

class colorpalette.Color

Create a Color object that can color/style strings. Color objects are an extension of the color function in the *ansicolors* package <<https://pypi.org/project/ansicolors/>>‘__.

Parameters

- ID: str** Name of color.
- fg: str** Foreground color.
- bg: str** Background color.
- style: str** Options include ‘bold’, ‘underline’, or None

Notes

Both *fg* and *bg* should be one of the following [-]:

- 3-element tuple or list of int, each valued 0 to 255 (e.g. (255, 218, 185)),
- string containing a CSS-compatible color name (e.g. ‘peachpuff’),
- string containing a CSS-style hex value (e.g. ‘#aaa’ or ‘#8a2be2’)
- string containing a CSS-style RGB notation (e.g. ‘rgb(102,51,153)’)
- None

Examples

Getting Started

ansi

[str] Ansi color code.

classmethod from_ansi (*ID=*”, *ansi=*”)

Create a Color object with ansi color code string.

RGB

[array] Foreground color in RGB on a 0-255 scale.

RGB_bg

[array] Background color in RGB on a 0-255 scale.

RGBn

[array] Foreground color in RGB on a normalized 0-1 scale.

RGBn_bg

[array] Background color in RGB on a normalized 0-1 scale.

HEX

[str] Foreground color in HEX code.

HEX_bg

[str] Background color in HEX code.

CHAPTER 4

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