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# ansicolortags Documentation

*Release public*

**Lilian Besson**

02/07/2016, 09h:23m:22s

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Welcome to the documentation for `ansicolortags`, a Python 2 or 3 module to use ANSI colors in a terminal application from Python.

The `ansicolortags` module provides an efficient and useful function (`printc()`) to print colored text in a terminal application with Python 2 and 3, with a *HTML-tag* like style:

```
>>> from ansicolortags import printc # Import the function
>>> printc("I like my sky to be <blue>blue<reset>, not <black>dark<reset> !")
I like my sky to be blue, not dark !
```

- This project is open-source [here on BitBucket](#).
  - This project is also available from Pypi, so a quick overview and the last release can be downloaded [from Pypi](#): <https://pypi.python.org/pypi/ansicolortags> !
- 

## 1 Installation

TL;DR: install this module and script in one command with `pip`:

```
pip install ansicolortags
```

### 1.1 Dependencies

The project is entirely written in pure Python, supporting both version 2 (2.7+) and version 3 (3.1+). It has **no dependencies** except a Python interpreter! For more details about the Python language, see [its official website](#).

### 1.2 How to install it ?

There is three different ways:

#### 1. Directly, with `pip`

The preferred way is to install `ansicolortags` directly with `pip` ([what is pip?](#)):

```
$ pip install ansicolortags
```

On GNU/Linux, it might be necessary to give it *sudo rights*:

```
$ sudo pip install ansicolortags
```

If you have both Python 2 and 3, and if you want to use the module *from both*, be sure to install it *with both* `pip2` and `pip3`:

```
$ sudo pip2 install ansicolortags # For Python 2 (v2.7+)
$ sudo pip3 install ansicolortags # For Python 3 (v3.1+)
```

## 2. Download, extract, and use `setup.py`

Or you can also follow these 4 steps:

1. download the file `ansicolortags.tar.gz` from Bitbucket, or from PyPi (if needed, it is signed numerically with my PGP key);
2. extract it (with `tar xzfv`, or a graphical solution, like File Roller);
3. then go in the subdirectory (`cd ansicolortags-0.4/`);
4. and finally install it with Python distutils `setup.py` tool:

```
$ python setup.py install
```

Or maybe with sudo rights, if the first try did not work :

```
$ sudo python setup.py install
```

For more information, run `python setup.py help` or `python setup.py install help`.

## 3. Without installing it

Note that installation *is not mandatory* : a third solution is to simply include JUST the file `ansicolortags.py`, and embed it in your own projects. The project can be used without installing *anything elsewhere*.

---

# 2 Examples

## 2.1 The function `ansicolortags.printc()`

The main function of this module is `printc` (`ansicolortags.printc()` (page 10)), for example use it like `printc("my string with color tags")`. This function works *exactly* like `print("my string with color tags")`.

For instance, a quick description of super hero's costumes can be done like this:

```
>>> printc("<reset><white>Batman's costume is <black>black<white>, Aquaman's costume is <blue>blue<white> Batman's costume is black, Aquaman's costume is blue and green, and Superman's costume is red and blue")
```

(Sorry, but it is hard to embed colors in the output of a Python command in a Sphinx generated web-pages.)

Another example, it will print the text “*France flag is blue, white and red !*” with appropriate colors:

```
>>> from ansicolortags import printc # Import the function
>>> printc("France flag is <blue>blue<reset>, <white>white<reset>, and <red>red<reset> !")
France flag is blue, white and red !
```

The function `printc()` should be imported from `ansicolortags` (page 7) (`ansicolortags.printc()` (page 10)).

Note that other useful functions are defined: `ansicolortags.writec()` (page 12) to write to a file, `ansicolortags.xtitle()` (page 12) to change the title of the terminal, `ansicolortags.sprint()` (page 11) to convert all the tags (e.g., `<red>`) in a string to their ANSI Code value (e.g., `\033[01;31m`), etc.

---

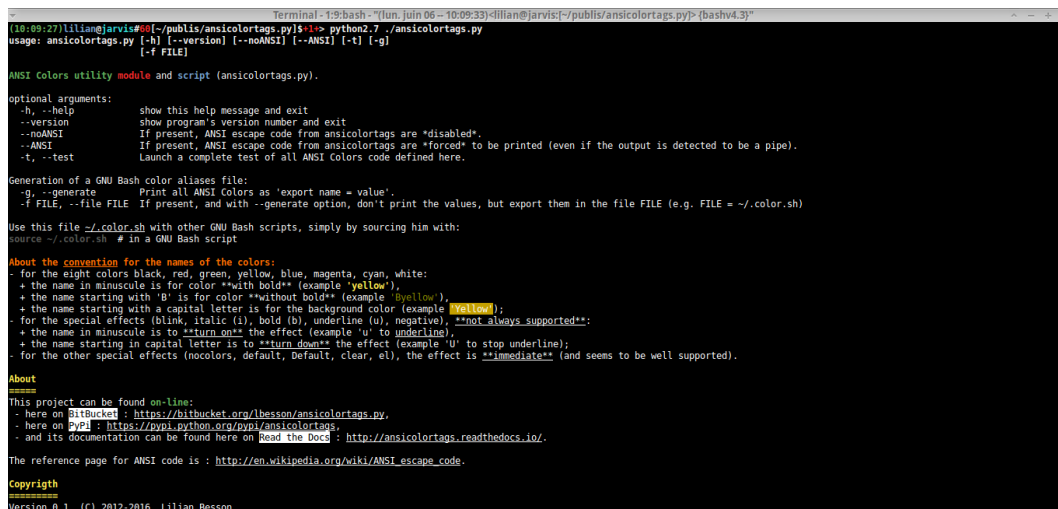
## 3 The script `ansicolortags.py`

But the project also installs a script, `ansicolortags.py`, which can be executed directly, or called with `python -m ansicolortags` after installation.

The script itself does not have a useful purpose, except for testing and demonstrating the capabilities of this project. If needed: `ansicolortags.py`.

### 3.1 `python -m ansicolortags --help`

This command shows the help of the script, colored with the tools defined in the script:



```
Terminal - 19: bash - 10:06:33 - 10:06:33 dillan@jarvis:~/publi/ansicolortags.py (bash4.3)
[10:06:27]lilian@jarvis:~/publi/ansicolortags.py$ python2.7 ./ansicolortags.py
usage: ansicolortags.py [-h] [--version] [--noANSI] [--ANSI] [-t] [-g]
                        [-f FILE]

ANSI Colors utility module and script (ansicolortags.py).

optional arguments:
  -h, --help            show this help message and exit
  --version             show program's version number and exit
  --noANSI             If present, ANSI escape code from ansicolortags are "disabled".
  --ANSI              If present, ANSI escape code from ansicolortags are "forced" to be printed (even if the output is detected to be a pipe).
  -t, --test           Launch a complete test of all ANSI colors code defined here.

Generation of a GNU Bash color aliases file:
  -g, --generate       Print all ANSI colors as 'export name = value'.
  -f FILE, --file FILE If present, and with --generate option, don't print the values, but export them in the file FILE (e.g. FILE = ~/.color.sh)

Use this file ~/.color.sh with other GNU Bash scripts, simply by sourcing him with:
source ~/.color.sh # in a GNU Bash script

About the convention for the names of the colors:
- for the eight colors black, red, green, yellow, blue, magenta, cyan, white:
  + the name in minuscule is for color "with bold" (example yellow),
  + the name starting with 'B' is for color "without bold" (example yellow),
  + the name starting with a capital letter is for the background color (example yellow);
- for the special effects (blink, italic (i), bold (b), underline (u), negative), "not always supported":
  + the name in minuscule is to "turn on" the effect (example 'u' to underline),
  + the name starting in capital letter is to "turn down" the effect (example 'U' to stop underline);
- for the other special effects (nocolors, default, Default, clear, el), the effect is "immediate" (and seems to be well supported).

About
=====
This project can be found on-line:
- here on bitbucket : https://bitbucket.org/lbesson/ansicolortags.py,
- here on PyPI : https://pypi.python.org/pypi/ansicolortags,
- and its documentation can be found here on Read the Docs : http://ansicolortags.readthedocs.io/.

The reference page for ANSI code is : http://en.wikipedia.org/wiki/ANSI\_escape\_code.

Copyright
=====
Version 0.1, (C) 2012-2016, Lilian Besson.
```

### 3.2 `python -m ansicolortags --test`

This command shows a complete test of all tags defined in the module:

```
Terminal - 1:9:ansicolortags.py - "(Jun, Jun 06 - 10:13:06)dillian@jarvis:~/publi/ansicolortags.py> (bashv4.3)"
10:12:34|lilian@jarvis#1~/publi/ansicolortags.py$ ./ansicolortags.py --test
Launching full test for ANSI colors, now the text is printed with default value of the terminal...
The color 'black' is used to make the following effect : !! This is a sample text for 'black' !!...
The color 'red' is used to make the following effect : !! This is a sample text for 'red' !!...
The color 'green' is used to make the following effect : !! This is a sample text for 'green' !!...
The color 'yellow' is used to make the following effect : !! This is a sample text for 'yellow' !!...
The color 'blue' is used to make the following effect : !! This is a sample text for 'blue' !!...
The color 'magenta' is used to make the following effect : !! This is a sample text for 'magenta' !!...
The color 'cyan' is used to make the following effect : !! This is a sample text for 'cyan' !!...
The color 'white' is used to make the following effect : !! This is a sample text for 'white' !!...
The color 'Bblack' is used to make the following effect : !! This is a sample text for 'Bred' !!...
The color 'Bred' is used to make the following effect : !! This is a sample text for 'Bgreen' !!...
The color 'Bgreen' is used to make the following effect : !! This is a sample text for 'Byellow' !!...
The color 'Byellow' is used to make the following effect : !! This is a sample text for 'Bblue' !!...
The color 'Bblue' is used to make the following effect : !! This is a sample text for 'Bmagenta' !!...
The color 'Bmagenta' is used to make the following effect : !! This is a sample text for 'Bcyan' !!...
The color 'Bcyan' is used to make the following effect : !! This is a sample text for 'Bwhite' !!...
The color 'Bwhite' is used to make the following effect : !! This is a sample text for 'Black' !!...
The color 'Black' is used to make the following effect : !! This is a sample text for 'Red' !!...
The color 'Red' is used to make the following effect : !! This is a sample text for 'Green' !!...
The color 'Green' is used to make the following effect : !! This is a sample text for 'Yellow' !!...
The color 'Yellow' is used to make the following effect : !! This is a sample text for 'Blue' !!...
The color 'Blue' is used to make the following effect : !! This is a sample text for 'Magenta' !!...
The color 'Magenta' is used to make the following effect : !! This is a sample text for 'Cyan' !!...
The color 'Cyan' is used to make the following effect : !! This is a sample text for 'White' !!...
The color 'White' is used to make the following effect : !! This is a sample text for 'Blink' !!...
The color 'Blink' is used to make the following effect : !! This is a sample text for 'nocolors' !!...
The color 'nocolors' is used to make the following effect : !! This is a sample text for 'default' !!...
The color 'default' is used to make the following effect : !! This is a sample text for 'default' !!...
The color 'italic' is used to make the following effect : !! This is a sample text for 'italic' !!...
The color 'Italic' is used to make the following effect : !! This is a sample text for 'b' !!...
The color 'b' is used to make the following effect : !! This is a sample text for 'B' !!...
The color 'B' is used to make the following effect : !! This is a sample text for 'u' !!...
The color 'u' is used to make the following effect : !! This is a sample text for 'U' !!...
The color 'U' is used to make the following effect : !! This is a sample text for 'neg' !!...
The color 'neg' is used to make the following effect : !! This is a sample text for 'Neg' !!...
The color 'clear' is used to make the following effect :
```

```
Terminal - 1:9:ansicolortags.py - "(Jun, Jun 06 - 10:13:06)dillian@jarvis:~/publi/ansicolortags.py> (bashv4.3)"

!! This is a sample text for 'el' !!...
The color 'reset' is used to make the following effect : !! This is a sample text for 'reset' !!...
The color 'bell' is used to make the following effect : !! This is a sample text for 'bell' !!...
The color 'title' is used to make the following effect : ...
The color 'warning' is used to make the following effect : /A/!! This is a sample text for 'warning' !!...
The color 'question' is used to make the following effect : /Z/!! This is a sample text for 'question' !!...
The color 'ERROR' is used to make the following effect : ERROR!! This is a sample text for 'ERROR' !!...
The color 'WARNING' is used to make the following effect : WARNING!! This is a sample text for 'WARNING' !!...
The color 'INFO' is used to make the following effect : INFO!! This is a sample text for 'INFO' !!...

!! This is a sample text for 'clear' !!...
```

### 3.3 --ANSI or --noANSI option

You can force to use ANSI codes (even if they appear to not be supported by the output, e.g. a pipe) with the `--ANSI` flag option, or force to disable them with the `--noANSI` flag option:

```
Terminal - 1:9:ansicolortags.py - "(Jun, Jun 06 - 10:16:57)dillian@jarvis:~/publi/ansicolortags.py> (bashv4.3)"
10:16:51|lilian@jarvis#4~/publi/ansicolortags.py$ python3.5 ./ansicolortags.py --help | head
usage: ansicolortags.py [-h] [--version] [--noANSI] [--ANSI] [-t] [-g]
                        [-F FILE]

ANSI Colors utility module and script (ansicolortags.py).

optional arguments:
  -h, --help            show this help message and exit
  --version             show program's version number and exit
  --noANSI              If present, ANSI escape code from ansicolortags are "disabled".
                        If present, ANSI escape code from ansicolortags are "forced" to be printed (even if the output is detected to be a pipe).
10:16:54|lilian@jarvis#5~/publi/ansicolortags.py$ python3.5 ./ansicolortags.py --help --ANSI | head
usage: ansicolortags.py [-h] [--version] [--noANSI] [--ANSI] [-t] [-g]
                        [-F FILE]

ANSI Colors utility module and script (ansicolortags.py).

optional arguments:
  -h, --help            show this help message and exit
  --version             show program's version number and exit
  --noANSI              If present, ANSI escape code from ansicolortags are "disabled".
  --ANSI               If present, ANSI escape code from ansicolortags are "forced" to be printed (even if the output is detected to be a pipe).
```

```

Terminal-1:9:ansicolortags.py - "(Jun. juin 06 - 10:16:25)<lilian@jarvis:~/publis/ansicolortags.py> (bashv4.3)"
[10:16:22]lilian@jarvis91[~/publis/ansicolortags.py]$: python3.5 ./ansicolortags.py --help --noANSI
usage: ansicolortags.py [-h] [--version] [--noANSI] [--ANSI] [-t] [-g]
                        [-f FILE]

ANSI Colors utility module and script (ansicolortags.py).

optional arguments:
  -h, --help            show this help message and exit
  --version             show program's version number and exit
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Generation of a GNU Bash color aliases file:
  -g, --generate       Print all ANSI Colors as 'export name = value'.
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Use this file ~/.color.sh with other GNU Bash scripts, simply by sourcing him with:
source ~/.color.sh # in a GNU Bash script

About the convention for the names of the colors:
- for the eight colors black, red, green, yellow, blue, magenta, cyan, white:
  + the name in minuscule is for color **with bold** (example 'yellow'),
  + the name starting with 'B' is for color **without bold** (example 'Byellow'),
  + the name starting with a capital letter is for the background color (example 'Yellow');
- for the special effects (blink, italic (i), bold (b), underline (u), negative), **not always supported**:
  + the name in minuscule is to **turn on** the effect (example 'u' to underline),
  + the name starting in capital letter is to **turn down** the effect (example 'U' to stop underline);
- for the other special effects (nocolors, default, Default, clear, el), the effect is **immediate** (and seems to be well supported).

About
=====
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- here on Bitbucket : https://bitbucket.org/lbesson/ansicolortags.py,
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- and its documentation can be found here on Read the Docs : http://ansicolortags.readthedocs.io/.

The reference page for ANSI code is : https://en.wikipedia.org/wiki/ANSI\_escape\_code.

Copyright
=====
Version 0.1, (C) 2012-2016, Lilian Besson.

```

### 3.4 python -m ansicolortags --generate

This command can be used to generate a `.color.sh` file, to be used in any GNU Bash script:

```

Terminal-1:9:ansicolortags.py - "(Jun. juin 06 - 10:19:31)<lilian@jarvis:~/publis/ansicolortags.py> (bashv4.3)"
[10:17:39]lilian@jarvis91[~/publis/ansicolortags.py]$: python2 ./ansicolortags.py --generate
#!/bin/sh
#
# From ansicolortags.py module, auto generated with the --generate command
# More information on https://bitbucket.org/lbesson/ansicolortags.py
#
# About the convention for the names of the colors :
# + for the eight colors black, red, green, yellow, blue, magenta, cyan, white:
# + the name in minuscule is for color **with bold** (example 'yellow'),
# + the name starting with 'B' is for color **without bold** (example 'Byellow'),
# + the name starting with a capital letter is for the background color (example 'Yellow').
# + for the special effects (blink, italic, bold, underline, negative), **not always supported** :
# + the name in minuscule is to **turn on** the effect,
# + the name starting in capital letter is to **turn off** the effect.
# + for the other special effects (nocolors, default, Default, clear, el), the effect is **immediate** (and seems to be well supported).
#
# About
# =====
# Use this file .color.sh in other GNU Bash scripts, simply by sourcing him with
# $ source ~/.color.sh
#
# Copyright
# =====
# (C) Lilian Besson, 2012-2016.
#
# List of colors
# =====
export black="\033[01;30m"
export red="\033[01;31m"
export green="\033[01;32m"
export yellow="\033[01;33m"
export blue="\033[01;34m"
export magenta="\033[01;35m"
export cyan="\033[01;36m"
export white="\033[01;37m"
export Bblack="\033[02;30m"
export Bred="\033[02;31m"
export Bgreen="\033[02;32m"
export Byellow="\033[02;33m"
export Bblue="\033[02;34m"
export Bmagenta="\033[02;35m"
export Bcyan="\033[02;36m"
export Bwhite="\033[02;37m"
export Black="\033[40m"
export Red="\033[41m"
export Green="\033[42m"
export Yellow="\033[43m"

```

## 4 Complete documentation

And, a detailed description of every functions and every constants of the `ansicolortags` (page 7) module is available on the documentation of the module `ansicolortags` (automatically generated from the docstrings in the file).

## 4.1 Contact the author if needed?

Hi, I am Lilian Besson, a French student at ÉNS de Cachan, in Mathematics and computer science (CS).

If needed, feel free to contact me :

1. either with [this web page](#);
2. or via my bitbucket account [lbesson](#);
3. or via email [here](#) (remove the [] and change DOT to . and AT to @).

You can use [this form](#) to inform me of a bug on `ansicolortags.py`:  
<https://bitbucket.org/lbesson/ansicolortags.py/issues?status=new&status=open> !

## 5 Index and tables

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### 5.1 Table of contents

#### Installation

TL;DR: install this module and script in one command with `pip`:

```
pip install ansicolortags
```

#### Dependencies

The project is entirely written in pure Python, supporting both version 2 (2.7+) and version 3 (3.1+). It has **no dependencies** except a Python interpreter! For more details about the Python language, see [its official website](#).

#### How to install it ?

There is three different ways:

**1. Directly, with pip** The preferred way is to install `ansicolortags` directly with `pip` ([what is pip?](#)):

```
$ pip install ansicolortags
```

On GNU/Linux, it might be necessary to give it *sudo rights*:

```
$ sudo pip install ansicolortags
```

If you have both Python 2 and 3, and if you want to use the module *from both*, be sure to install it *with both* `pip2` and `pip3`:

```
$ sudo pip2 install ansicolortags # For Python 2 (v2.7+)
$ sudo pip3 install ansicolortags # For Python 3 (v3.1+)
```

## 2. Download, extract, and use `setup.py`

Or you can also follow these 4 steps:

1. download the file [ansicolortags.tar.gz](#) from Bitbucket, or from PyPi (if needed, it is signed numerically with my PGP key);
2. extract it (with `tar xzfv`, or a graphical solution, like File Roller);
3. then go in the subdirectory (`cd ansicolortags-0.4/`);
4. and finally install it with Python distutils `setup.py` tool:

```
$ python setup.py install
```

Or maybe with sudo rights, if the first try did not work :

```
$ sudo python setup.py install
```

For more information, run `python setup.py help` or `python setup.py install help`.

## 3. *Without installing it*

Note that installation *is not mandatory* : a third solution is to simply include JUST the file `ansicolortags.py`, and embed it in your own projects. The project can be used without installing *anything elsewhere*.

### ansicolortags module

An efficient and simple ANSI colors module (and also a powerful script), with functions to print text using colors. <https://bitbucket.org/lbesson/ansicolortags.py>

The names of the colors follow these conventions:

- for the eight ANSI colors (black, red, green, yellow, blue, magenta, cyan, white):
  - the name in minuscule is for color **with bold** (example ‘yellow’),
  - the name starting with ‘B’ is for color **without bold** (example ‘Byellow’),
  - the name starting with a **capital** letter is for the background color (example ‘Yellow’).
- for the special effects (blink, *italic*, **bold**, underline, negative), they might not always be supported, but they usually are:
  - the name in minuscule is used to turn *on* the effect (example ‘i’ to turn on italic),
  - the name starting in capital letter is used to turn *down* the effect (example ‘I’ to turn off italic).
- for the other special effects (`nocolors`, `default`, `Default`, `clear`, `el`), the effect is **immediate** (and seems to be well supported).

### List of functions

#### To print a string

- `sprint()` (page 11): give a string,
- `printc()` (page 10): like `print()`, but with interpreting tags to put colors. **This is the most useful function in this module !**
- `writetc()` (page 12): like `printc()`, but using any file object (and no new line added at the end of the string).

## To clean the terminal or the line

- `erase()` (page 10): erase all ANSI colors tags in the string (like `sprint`, but erasing and not interpreting color tags),
- `clearLine()` (page 10), `clearScreen()` (page 10): to clear the current line or screen,
- `Reset()` (page 9): to return to default foreground and background, and stopping all *fancy* effects (like blinking or reverse video).

## Others functions

- `notify()` (page 10): try to display a *system* notification. **Only on GNU/Linux with notify-send installed.**
- `xtitle()` (page 12): try to set the *title* of the terminal. Warning: **not always supported.**

## Example of use (module)

To store a string, use `sprint()` (page 11) (i.e. print to a string, *sprint*), like this:

```
>>> example = sprint("France flag is <blue>blue<white>white<red>red<white>, Italy flag have <green>green<white>white<red>red<white>")
>>> example
'France flag is [01;34mblue[01;37mwhite[01;31mred[01;37m, Italy flag have [01;32mgreen on it[01;37m.'
```

The string `example` can then be printed, with colors, with:

```
>>> print(example) # Sorry, but in the documentation it is hard to show colors :)
France flag is bluewhitered, Italy flag have green on it.
```

To directly print a string colored by tags, use `printc()` (page 10) (colors will be there if you try this in your terminal):

```
>>> printc("Batman's costum is <black>black<white>, Aquaman's costum is <blue>blue<white> and <green>green<white>white<red>red<white>")
Batman's costum is black, Aquaman's costume is blue and green.
```

## See also:

This is the most useful function. To do the same, but on any file, use `writetec()` (page 12).

Moreover, the function `erase()` (page 10) can also be useful to simply delete all *valid* color tags:

```
>>> print(erase("Batman's costum is <black>black<white>, Aquaman's costum is <blue>blue<white> and <green>green<white>white<red>red<white>"))
Batman's costum is black, Aquaman's costum is blue and green, and this is a non-valid <tag>, so it is not a color tag.
```

In this last example, an `<el>` tag (`el`) is used to erase the current content of the line, useful to make a *dynamical* print:

```
>>> writetec("<red>Computing <u>len(str(2**562016))<reset>..."); tmp = len(str(2**562016)); writetec("<green>Done !")
Done !
```

The first part of the line 'Computing len(str(2\*\*562016))...' have disappeared after the computation! (which takes about one second).

## Example of use (script)

- To show the help \$ `ansicolorortags.py --help`;
- To run a test \$ `ansicolorortags.py --test`;

- To produce a GNU Bash color aliases file `$ ansicolortags.py --generate --file ~/.color_aliases.sh`.

## Auto detection

This script can normally detect if ANSI codes are supported :

1. `$ ansicolortags.py --help` : will print with colors if colors seems to be supported;
2. `$ ansicolortags.py --help --noANSI` : will print without any colors, even if it is possible;
3. `$ ansicolortags.py --help --ANSI` : will force the use of colors, even if they seems to be not supported.

And, the module part behaves exactly like the script part.

---

## Elsewhere online

This project can be found on-line:

- here on BitBucket: <https://bitbucket.org/lbesson/ansicolortags.py>
- here on PyPi: <https://pypi.python.org/pypi/ansicolortags>

And some documentation on ANSI codes:

- The reference page for ANSI code is : [here on Wikipedia](#).
- A reference page for XTitle escape code is : [here](#).

## Copyrigh

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## Complete documentation

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**Note:** The doc is available on-line, on [Read the Docs](http://ansicolortags.readthedocs.io/): <http://ansicolortags.readthedocs.io/>.

---

`ansicolortags.Reset()` → unit

**Try to** reset the current ANSI codes buffer, using `reset`.

`ansicolortags._generate_color_sh(file_name=None)` → string | unit.

Used to print or generate (if `file_name` is present and is a valid URI address) a profile of all the colors defined in this file.

Print all ANSI Colors as `export NAME="VALUE"`. Useful to automatically generate a `.color.sh` file, to be used with Bash: and now you can easily colorized your Bash script with `. color.sh` to import all colors.

The file is a list of `export NAME="VALUE"`, to be used with GNU Bash.

---

**Note:** For example, to generate the `color.sh` file with this script, use the `-g` or `--generate` option, with `-f FILE` or `--file FILE`:

```
$ python -m ansicolortags -g -f color.sh
```

**Hint:** I suggest to save this `.color.sh` file to your home, like `~/.color.sh`, so it will be available for any GNU Bash script. During the last 4 years, [all the Bash scripts I wrote](#) that uses this color profile (or assume it to be enabled, e.g. from [your .bashrc file](#)) assume it to be saved as `~/.color.sh`.

For instance, [PDFCompress](#), [git-blame-last-commit.sh](#), [mymake.sh](#), [makequotes.sh](#), [photosmagic.sh](#), [remove\\_trailing\\_spaces.sh](#), [series.sh](#), [strapdown2pdf.sh](#), [Volume.sh](#) etc.

In a Bash script, I suggest to source this `.color.sh` file like this (it checks if the file exists before sourcing it):

```
[ -f ~/.color.sh ] && . ~/.color.sh
```

`ansicolortags._run_complete_tests()` → unit.

Launch a complete test of all ANSI Colors code in the list `colorList`.

`ansicolortags.clearLine()` → unit

**Try to** clear the current line using ANSI code `el`.

`ansicolortags.clearScreen()` → unit

**Try to** clear the screen using ANSI code `clear`.

`ansicolortags.erase(chainWithTags, left='<', right='>', verbose=False)` → string

Parse a string containing color tags, when color is one of the previous define name, and then return it, with color tags **erased**.

Example:

```
>>> print(erase("<blue>This is blue.<white> And <this> is white.<red> Now this is red because I  
This is blue. And <this> is white. Now this is red because I am <angry> !
```

This example seems exactly the same that the previous one in the documentation, but it's not (it is impossible to put color in the output of a Python example in Sphinx documentation, so there is **no color in output** in the examples... but be sure there is the real output !).

**Warning:** This function can mess up a string which has unmatched opening and closing tags (< without a > or > without a <), use it carefully.

`ansicolortags.notify(msg='', obj='Notification sent by ansicolortags.notify', icon=None, verb=False)` → bool

Notification using `subprocess` and `notify-send` (GNU/Linux command-line program). Also print the informations directly to the screen (only if `verb=True`).

**Warning:** This does not use any *ANSI escape* codes, but the common *notify-send* GNU/Linux command line program. It will probably fail (but cleanly) on Windows or Mac OS X.

- Return True if and only if the title have been correctly changed.

- Fails simply if `notify-send` is not found.

`ansicolortags.printc(chainWithTags, *objects, left='<', right='>', sep=' ', end='n', erase=False, **kwargs)` → unit

Basically a shortcut to `print(sprint(chainWithTags))` : it analyzes all tags (i.e., it converts the tags like `<red>` to their ANSI code value, like `red`), and then it prints the result.

Example (in a terminal the colors, and the bold and underlining effects would be there):

```
>>> printc("<reset><white>« <u>Fifty shades of <red>red<white><U> » could be a <green>good<white>
« Fifty shades of red » could be a good book, if it existed.
```

It accepts one or more “things” to print, exactly like `print()`: for each value `arg_i` in `*objects`:

- if `arg_i` is a string, it is converted using `sprint(arg_i, left=left, right=right)` (`sprint()` (page 11)), and then passed to `print()`.
- otherwise `arg_i` is passed to `print()` without modification (in the same order, of course).

Example with more than one object:

```
>>> print("OK n =", 17, "and z =", 1 + 5j, ".")
OK n = 17 and z = (1+5j) .
>>> printc("<green>OK<white> n =<magenta>", 17, "<white>and z =<blue>", 1 + 5j, "<reset>.") # i
OK n = 17 and z = (1+5j) .
```

This is the more useful function in this package.

- If `erase = True`, then `erase()` (page 10) is used instead of `sprint()` (page 11)

---

**Hint:** I suggest to use [ansicolortags.py](#) in your own project with the following piece of code:

```
try:
    from ansicolortags import printc
except ImportError:
    print("WARNING: ansicolortags was not found, disabling colors instead.\nPlease install it wi
    def printc(*a, **kwargs):
        print(*a, **kwargs)
```

---

**Hint:** During the last 4 years, a lot of the small Python scripts I wrote try to use this module to add some colors: for example, [FreeSMS.py](#), [plotnotes.py](#), [strapdown2html.py](#), [calc\\_interets.py](#)...

`ansicolortags.sprint(chainWithTags, left='<', right='>', verbose=False) → string`

Parse a string containing color tags, when color is one of the previous define name, and then return it, with color tags changed to concrete ANSI color codes.

**Tags are delimited** by `left` and `right`. By default, it's **HTML / Pango style** whit '`<`' and '`>`', but you can change them.

For example, a custom style even closer to HTML could be: `left='<span color=' and right = '</span>' is also possible.`

**Warning:** It is more prudent to put nothing else than ANSI Colors (i.e. values in `colorList`) between '`<`' and '`>`' in `chainWithTags`. The behavior of the function in case of false tags **is not perfect**. Moreover, a good idea could be to try not to use '`<`' or '`>`' for anything else than tags. I know, it's not perfect. But, the syntax of color tags is so simple and so beautiful with this limitation that you will surely forgive me this, *won't you* ;) ?

Example (where unknown tags are left unmodified, and the colors should be there):

```
>>> print(sprint("<blue>This is blue.<white> And <this> is white.<red> Now this is red because I
This is blue. And <this> is white. Now this is red because I am <angry> !
```

This function is used in all the following, so all other function can also use `left` and `right` arguments.

`ansicolortags.tocolor(mystring) → string`

Convert a string to a color. `mystring` **have** to be in `colorDict` to be recognized (and interpreted). Default value if `mystring` is not one of the color name is "" the empty string.

`ansicolortags.writec(chainWithTags="", out=sys.stdout, left='<', right='>', flush=True) → unit`

Useful to print colored text **to a file**, represented by the object `out`. Also useful to print colored text, but without any trailing 'n' character.

In this example, before the long computation begin, it prints 'Computing 2\*\*(2\*\*(2\*\*4))....', and when the computation is done, erases the current line (with `<el>` tag, `el`), and prints ' Done !' in green, and the result of the computation:

```
>>> writec("<red>Computing<reset> 2**(2**(2**4))...."); tmp = 2**(2**(2**4)); writec("<el><green> Done !")
```

This example show how to use this module to write colored data in a file. Be aware that this file now contains ANSI escape sequences. For example, `$ cat /tmp/colored-text.txt` will well print the colors, but editing the file will show *hard values* of escape code:

```
>>> my_file = open('/tmp/colored-text.txt', mode = 'w') # Open an random file.
>>> write("<blue>this is blue.<white>And <this> is white.<red>Now this is red because I am <angry>")
>>> # Now this file '/tmp/colored-text.txt' has some ANSI colored text in it.
```

Remark: It can also be used to simply reinitialize the ANSI colors buffer, but the function `Reset()` (page 9) is here for this:

```
>>> writec("<reset>")
```

**Warning:** The file `out` **will be flushed** by this function if `flush` is set to `True` (this is default behavior). If you prefer no to, use `flush=False` option:

```
>>> writec(chainWithTags_l, out=my_file, flush=False)
>>> # many things...
>>> writec(chainWithTags_n, out=my_file, flush=False)
>>> my_file.flush() # only flush here!
```

`ansicolortags.xtitle(new_title="", verb=False) → 0 or 1`

**Modify the current terminal title.** Returns 0 if one of the two solutions worked, 1 otherwise.

An experimental try is with **ANSI escape code**, if the simple way by calling the `xtitle` program does not work (or if it is not installed).

**Note:** The second solution simply uses the two *ANSI Tags* `<title>` (title) and `<bell>` (bell). So, you can also do it with:

```
>>> ansicolortags.writec("<title>This is the new title of the terminal<bell>")
```

But this function `xtitle` is better: it tries two ways, and returns a signal to inform about his success.

## TODOs for ansicolortags package ?

1. Improve support of Windows ?
2. Add automated tests.
3. Use travis or another solution to automatically check if the build passes after each commit.

4. Write a comparison with other ANSI color modules, showing the advantages of mine (and disadvantages).
  5. Write a page on the doc about the use of `.color.sh` in a GNU bash script.
- 

This project is currently in version 0.1, release public. Last update of this doc was made 02/07/2016, 09h:23m:22s.

---

**Note:** This project is based on my old [ANSIColors-balises](#) project, which was only for Python 2.7.

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## 5.2 The MIT License (MIT)

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### 5.3 Cloud of words

Words from ansicolortags.py - (C) 2016 Lilian Besson



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