

# Fancy Print Module

## Screen Functions

<code>clear()</code>	It Clears the terminal and return the cursor to home (it uses the system command).
<code>clean()</code>	It Cleans the terminal and return the cursor to home (it uses the ansi command).
<code>erase()</code>	It Erases the terminal and leave the cursor to in the current position (it uses the ansi command).
<code>dimensions()</code>	It returns the dimensions of the terminal, cols and rows.
<code>resize(rows=25, cols=80)</code>	It resizes the terminal size.

### Example:

```
import fancyprint as fp
fp.clear()
fp.resize(rows=30, cols=100)
r, c = fp.dimensions()
```

## Internal Functions

`bg_ansi_colors(bold=False, fg=-1, n_line=0)`

This function displays all background colors available with ansi code. Three options for better visualization.

- 1.- The option bold for the font (True / False)
- 2.- The option fg to visualize the background colors with a specific foreground color.
- 3.- The option n\_line to insert lines between the colors.

`fg_ansi_colors(bold=False, bg=-1, n_line=0)`

This function displays all foreground colors available with ansi code. Three options for better visualization.

- 1.- The option bold for the font (True / False)
- 2.- The option bg to visualize the background colors with a specific foreground color.
- 3.- The option n\_line to insert lines between the colors.

`ins_chr(n=1, unicode=" ")` → This function inserts n times the unicode provided, by default is set to space.

`ins_newline(n=1)` → This function insert n new lines.

`terminal_bell()` → This function makes the sound of the terminal bell.

`reset_font()` → This function reset the font attributes when we use the `set_font()` function.

`set_font(bold=False, bg=-1, fg=-1, italic=False, underline=False, strike=False, blinking=False, dim=False, hidden=False, inverse=False)`

- This function pass many attributes for the font. If passing all these arguments is a little annoying to you, you can use the Font Style Class for simplicity.

Colors range goes from -1 to 256. To set the default color use -1 or 256.

### Example:

```
import fancyprint as fp
print(fp.set_font(1,11,21) + " Python is " + fp.set_font(0,1) + " Wonderful."+fp.reset_font())
print(f"{fp.set_font(bold=0, bg=22, fg=0)} Python {fp.set_font(1,90,7)} Language.{fp.reset_font()}")
```

**Note:** This functions are being used by the FancyFormat Class. Feel free to ignore them if not useful to you.

## Help Classes

**Move** → This class is used with the Cursor class and it contains 4 options.

Move.RIGHT      Move.LEFT      Move.UP      Move.DOWN

**Note:** These options can be replaced for the original values as display below:

Move.RIGHT = "right" = "r"      Move.LEFT = "left" = "l"  
Move.UP = "up" = "u"      Move.DOWN = "down" = "d"

**Align** → This class is used with the FancyFormat class and FancyMessage class. It contains 4 options.

Align.RIGHT      Align.LEFT      Align.CENTER      Align.JUSTIFY

**Note:** These options can be replaced for the original values as display below:

Align.RIGHT = "right" = "r"      Align.LEFT = "left" = "l"  
Align.CENTER = "center" = "c"      Align.JUSTIFY = "justify" = "j"

**Layout** → This class is used with FancyFormat class and Draw class. It contains 2 options.

Layout.HORIZONTAL = "horizontal"      Layout.VERTICAL = "vertical"

**Length\_bg** → This class is used with FancyMessage class and contains 2 options.

ALL\_ROW      ONLY\_WORD

**Unicode** → This class is to insert some unicode characters.

#-----	
# Lines	Triangle -
#-----	
BOX_DRAWINGS_LIGHT_HORIZONTAL	BLACK_UP_POINTING_TRIANGLE
BOX_DRAWINGS_LIGHT_VERTICAL_AND_RIGHT	WHITE_UP_POINTING_TRIANGLE
BOX_DRAWINGS_LIGHT_VERTICAL_AND_LEFT	BLAKC_RIGHT_POINT_TRIANGLE
BOX_DRAWINGS_LIGHT_VERTICAL	WHITE_RIGHT_POINT_TRIANGLE
BOX_DRAWINGS_LIGHT_DOWN_AND_HORIZONTAL	BLACK_DOWN_POINTING_TRIANGLE
BOX_DRAWINGS_LIGHT_UP_AND_HORIZONTAL	WHITE_DOWN_POINTING_TRIANGLE
BOX_DRAWINGS_LIGHT_VERTICAL_AND_HORIZONTAL	BLACK_LEFT_POINTING_TRIANGLE
EM_DASH	WHITE_LEFT_POINTING_TRIANGLE
#-----	
# Miscellaneous	-
#-----	
BLACK_DIAMOND	WHITE_DIAMOND
BLACK_CIRCLE	WHITE_CIRCLE
FACE	

**For more reference** → <https://www.unicode.org/charts/nameslist/>

**Line\_Style** → This class is used with FancyFormat class and Draw class. There are 8 options.

Style\_Line.CUSTOMIZED      Style\_Line.SINGLE  
Style\_Line.SINGLE\_BOLD      Style\_Line.SINGLE\_HEAVY

Style\_Line.DOUBLE  
Style\_Line.SQR\_BRACKETS

Style\_Line.DASH  
Style\_Line.NONE

**Note:** These options can be replaced for the original value as display below:

Style_Line.CUSTOMIZED	→ "customized"	Style_Line.SINGLE	→ "single"
Style_Line.SINGLE_BOLD	→ "single_bold"	Style_Line.SINGLE_HEAVY	→ "single_heavy"
Style_Line.DOUBLE	→ "double"	Style_Line.DASH	→ "dash"
Style_Line.SQ_BRACKETS	→ "sq_brackets"	Style_Line.NONE	→ "none"

## Cursor Class

This class contains 4 methods. The difference between jump and move is that jump execute the code while move return the code.

**jumpTo** → This method jumps rows or columns for the cursor in the terminal.

**jumpxy** → This method jumps the cursor to a specific coordinates in the terminal.

**moveTo** → This method moves rows or columns for the cursor in the terminal.

**movexy** → This method moves the cursor to a specific coordinates in the terminal.

### Example:

```
import fancyprint as fp
crs = fp.Cursor()
crs.jumpTo(4, "D")

crs.jumpTo(qty=20, direction=fp.Move.RIGHT) ← . → crs.jumpTo(qty=20, direction="right")
print("Hello There...!")

print(f"{crs.moveTo(qty=20, direction=fp.Move.RIGHT)}Hello There...!")

print(f"{crs.movexy(0,10)}Col 10, row 1")
```

## FontStyle Class

This class contains 4 methods and the attributes and their default values are display below.

<b>bold</b> = False	<b>bg</b> = -1	<b>fg</b> = -1	<b>italic</b> = False
<b>dim</b> = False	<b>underline</b> = False	<b>blinking</b> = False	<b>inverse</b> = False
<b>hidden</b> = False	<b>strike</b> = False	<b>indent</b> = False	<b>next_line</b> = True

**indent** → this define how far we want to start to print the message from the left.

**next\_line** → this define where we want to jump the line or not when printing the message.

**print\_style(msg)** → This method will print the style with the defined attributes.

### Example:

```
import fancyprint as fp
fs = fp.FontStyle()
fs.bg = 21
fs.fg = 231
fs.print_style(" My Font Style ")
```

**reset\_style()** → This method will reset the style to the default values.

```
fs.reset_style()
```

```
fs.print_style(" My Font Style ")
```

`start_style()` and `stop_style()` → This methods are used if we will be continuing using the style in many rows.

**Example:**

```
import fancyprint as fp
fs = fp.FontStyle()
fs.bg = 21
fs.fg = 231
print(f"{fs.start_style()} Font Style Line 1")
print(f" Font Style Line 2 {fs.stop_style()}")
fs.reset_style()
print(f"{fs.start_style()} Default Style {fs.stop_style()}")
```

## FancyMessage Class

```
#-----
# Body Default Values
#-----
bg_body    = 4                underline_body = False          msg_body    = "Body Msg
fg_body    = 231              blinking_body  = False          right_indent = 2
bold_body  = False            inverse_body   = False          left_indent  = 2
dim_body   = False            hidden_body    = False          top_lines   = 1
italic_body= False            strike_body   = False          bottom_lines = 1

help_lines = False            length = Length_bg.ALL_ROW

# These two options work when length is Length_bg.ONLY_WORD. They don't do anything when length is Length_bg.All_ROW.
adj_bg_lines_to_right_indent = False
adj_bg_msg_to_space_available = False
```

**Note:** All the above variables are being used by both methods, `print_fancy_message` and `print_fancy_note`.

```
#-----
# Note Attributes
#-----
msg_note = " Note: "          align_note   = Align.JUSTIFY      blinking_note = False
bg_note   = 231                strike_note  = False              underline_note = False
fg_note   = 0                  italic_note   = False              position_note  = 1
bold_note = False              inverse_note  = False              right_space_note = 2
dim_note  = False              hidden_note   = False              left_space_note = 2
#-----
# Title Attributes
#-----
msg_title = ""                align_title  = Align.LEFT          blinking_title = False
bg_title  = 4                  strike_title = False              underline_title = False
fg_title  = 231                italic_title = False              title_indent   = 2
bold_title = False             inverse_title = False              lines_title_body = 1
dim_title = False              hidden_title = False
#-----
# Footnote Attributes
#-----
msg_footnote = ""              align_footnote = Align.RIGHT      blinking_footnote = False
bg_footnote  = 4                strike_footnote = False           underline_footnote = False
fg_footnote  = 231              italic_footnote = False           footnote_indent  = 2
bold_footnote = False           inverse_footnote = False           lines_body_footnote = 1
dim_footnote = False            hidden_footnote = False
```

### Example:

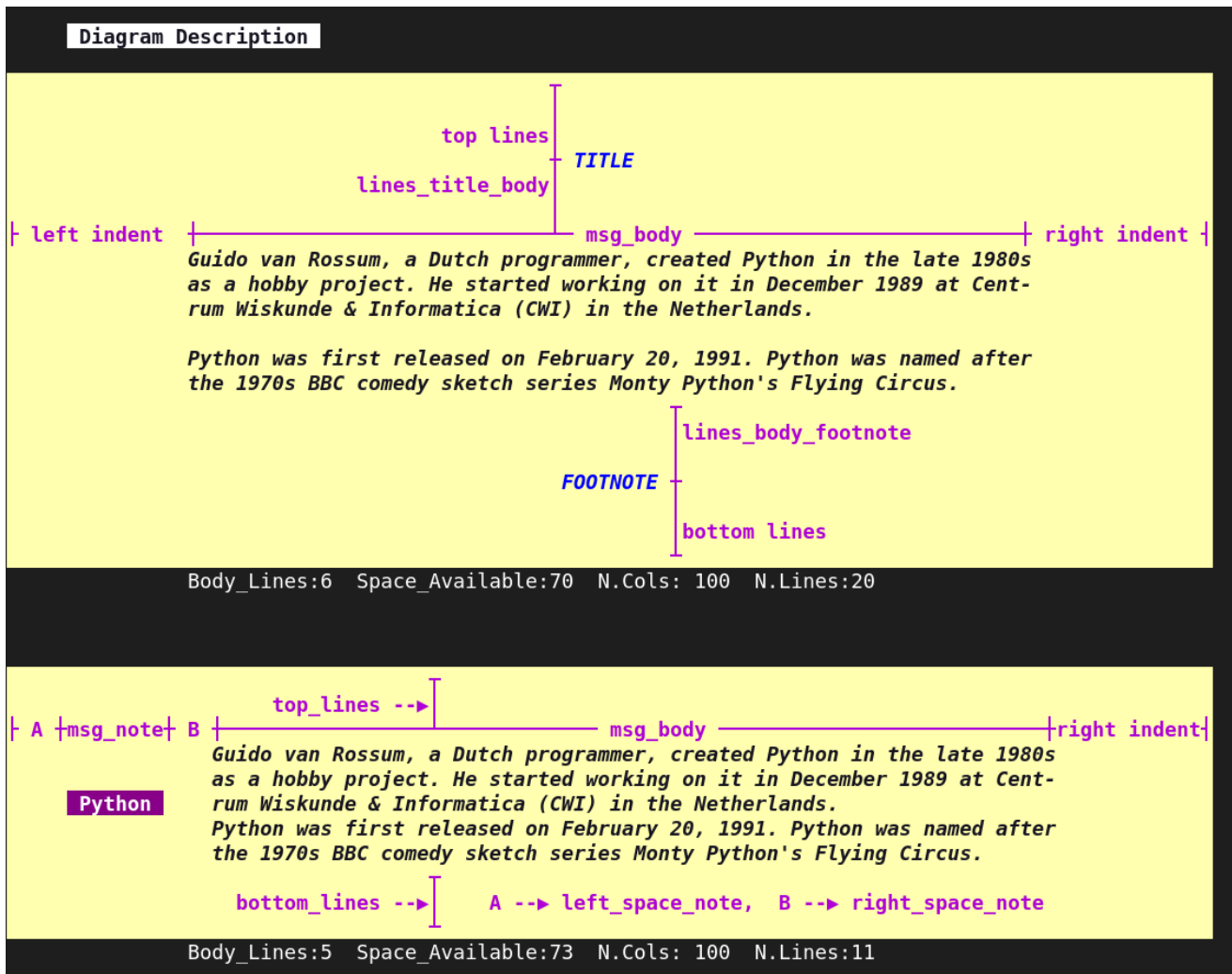
```
paragraph = ""
```

Guido van Rossum, a Dutch programmer, created Python in the late 1980s as a hobby project. He started working on it in December 1989 at Centrum Wiskunde & Informatica (CWI) in the Netherlands.

Python was first released on February 20, 1991. Python was named after the 1970s BBC comedy sketch series Monty Python's Flying Circus.

```
""
```

```
import fancyprint as fp
msg = fp.FancyMessage()
msg.msg_title = "TITLE"
msg.msg_footnote = "FOOTNOTE"
msg.print_fancy_message(paragraph)
fp.ins_newline(2)
msg.msg_note = "Python"
msg.print_fancy_note(paragraph)
```



### FancyFormat Class

This class contains two methods.

```
print_fancy_format(data, style)
reset_fancy_format()
```

Two arguments, the data to print and the line style.  
It reset all the attributes to their default values.

### Examples:

```
import fancyprint as fp
list1 = fp.FancyFormat()
```

**Case 1:** Passing the any type of variable.

```
list1.print_fancy_format("Hello World...!")
```

Output:

```
+-----+
| Hello World...! |
+-----+
```

**Case 2:** Passing the wrong type of variable.

```
my_list = []
list1.print_fancy_format(my_list)
```

Output:

```
+-----+
| none |
+-----+
```

**Case 3:** Passing single item in a list.

```
my_list1 = ["Hello World...!"]
list1.print_fancy_format(my_list1)
```

Output:

```
+-----+
| Hello World...! |
+-----+
```

**Case 4:** Passing single item in a row to a list.

```
my_list1 = ["hello there!"]
list1.print_fancy_format(my_list1)
```

Output:

```
+-----+
| hello there! |
+-----+
```

**Case 5:** Passing a list.

```
my_list1 = [1,2,3,4]
list1.print_fancy_format(my_list1)
my_list1 = ["Terminology", "hello there!", "I am Miguelito"]
list1.print_fancy_format(my_list1)
```

Output:

```
+-----*-----*-----*-----+
| 1 | 2 | 3 | 4 |
+-----*-----*-----*-----+

+-----*-----*-----*-----+
| Terminology | hello there! | I am Migue |
+-----*-----*-----*-----+
```

**Case 6:** Passing a list in a single row.

```
my_list1 = [[1,2,3,4]]
list1.print_fancy_format(my_list1)
my_list1 = [["Terminology", "hello there!", "I am Hello"]]
list1.print_fancy_format(my_list1)
```

Output:

```
+-----*-----*-----*-----+
| 1 | 2 | 3 | 4 |
+-----*-----*-----*-----+

+-----*-----*-----*-----+
| Terminology | hello there! | I am Hello |
+-----*-----*-----*-----+
```

**Case 7:** Passing a list with a some combination rows and cols.

```
my_list1 = [[5, "hello"], 6, 50, [45]]
list1.print_fancy_format(my_list1)

my_list1 = [10, [50], [250], ["C"], ["H"], 10, 20]
list1.print_fancy_format(my_list1)
```

Output:

```
+-----*-----*-----*-----+
| [5, 'hello'] | 6 | 50 | [45] |
+-----*-----*-----*-----+

+-----*-----*-----*-----*-----*-----*-----+
| 10 | [50] | [250] | ['C'] | ['H'] | 10 | 20 |
+-----*-----*-----*-----*-----*-----+
```

**Case 8:** Passing a list with rows and one cols.

```
my_list1 = [[10], [20], [30], [40]]
list1.print_fancy_format(my_list1)
```

```

output: +-----+           +-----+
        | R1C1 |           | 10 |
        | R1C2 |           | 20 |
        | R1C3 |           | 30 |
        | R1C4 |           | 40 |
        +-----+           +-----+

```

#### Case 9:

Passing a list with a some combination rows and cols.

```

my_list1 = [
    ["R1C1","R1C2","R1C3"],
    ["R2C1","R2C2","R2C3"],
    ["R3C1","R3C2","R3C3"]]

```

```
list1.print_fancy_format(my_list1)
```

Output:

```

+-----+-----+-----+-----+
| R1C1 | R1C2 | R1C3 | R1C4 |
| R2C1 | R2C2 | R2C3 | R2C4 |
| R3C1 | R3C2 | R3C3 | R3C4 |
| R4C1 | R4C2 | R4C3 | R4C4 |
+-----+-----+-----+-----+

```

```

my_list1 = [
    ["R1C1","R1C2","R1C3"],
    ["R2C1","R2C2","R2C3"],
    ["R3C1","R3C2","R3C3"]]

```

```

list1.horizontal_header_line = 1
list1.middle_horizontal_line_on = 1
list1.print_fancy_format(my_list1)

```

Output:

```

+-----+-----+-----+-----+
| R1C1 | R1C2 | R1C3 | R1C4 |
+-----+-----+-----+-----+
| R2C1 | R2C2 | R2C3 | R2C4 |
+-----+-----+-----+-----+
| R3C1 | R3C2 | R3C3 | R3C4 |
+-----+-----+-----+-----+
| R4C1 | R4C2 | R4C3 | R4C4 |
+-----+-----+-----+-----+

```

**Note:** Although the main idea is to use list type, `print_fancy_format()` accepts any type of variables.

#### Attributes in FancyFormat Class:

```

#-----
# General Use Section
#-----
adj → adjust
adj_top_margin = 0      adj_bottom_margin = 0      adj_indent = 2      set_fill_chr = "----"
adj_top_space  = 0      adj_bottom_space  = 0      adj_space  = 2      update_list = False
                                   set_layout   = Layout.HORIZONTAL

```

`adj_top_margin` Lines to be added between the terminal (\$) and the title. It only accepts int values.

`adj_top_space` Lines to be added between title and top list. It only accepts int values.

`adj_bottom_margin` Lines to be added between the end of the list or footnote to the terminal (\$).

`adj_bottom_space` Lines to be added between the bottom of the list and the footnote. It only accepts int values.

`adj_indent` Space from the left terminal to the first character in the list to be printed. It only accepts int values.

`adj_space` Space from the left of the box to the first character in the list to be printed. It only accepts int values.

`set_fill_chr` When a list is not complete in the data, it will be filled out with some characters. `fill_chr` will be converted to string.

`update_list` Notice that every single element in the list being passed will be converted to string in a temporary internal list.

If you want to save this conversion to your original list then set to True. It only works with list type of variable.

`set_layout` This option only works with set, setfrozen or range type of variables.

**Note:** adj\_margin and adj\_top\_space will not work if the title is not set up. Also adj\_bottom\_space will not work if the footnote is not set up. Use print("\n") if you need space.

```
#-----  
# Title Section  
#-----  
msg_title = ""          align_title = "justify"      hidden_title = False  
bold_title = False      italic_title = False      inverse_title = False  
bg_title   = -1         strike_title = False      blinking_title = False  
fg_title   = -1         dim_title   = False          underline_title = False
```

msg\_title The title name for the list. It only accepts string values, by default is empty.

bold\_title It only accepts two int values 0 and 1, by default is set to 0.

bg\_title and fg\_title accepts int values from -1 to 256. Default value is -1 or 256.

align\_title It accepts 4 values, left (l), justify (j), center (c), and right (r).

```
#-----  
# Footnote Section  
#-----  
msg_footnote = ""          align_footnote = "justify"      hidden_footnote = False  
bold_footnote = False      italic_footnote = False      inverse_footnote = False  
bg_footnote   = -1         strike_footnote = False      blinking_footnote = False  
fg_footnote   = -1         dim_footnote   = False          underline_footnote = False
```

msg\_footnote The title name for the list. It only accepts string values, by default is empty.

bold\_footnote It only accepts two int values 0 and 1, by default is set to 0.

bg\_footnote and fg\_footnote accepts int values from -1 to 256. Default value is -1 or 256.

align\_footnote It accepts 4 values, left (l), justify (j), center (c), and right (r).

```
#-----  
# Data Section  
#-----  
align_data = "justify"      hidden_data = False          inverse_data = False  
bold_data   = False        italic_data = False          blinking_data = False  
bg_data     = -1           strike_data = False          underline_data = False  
fg_data     = -1           dim_data    = False          bg_all_cell_data = True
```

bg\_all\_cell\_data The bg color will affect the entire cell or just the data.

align\_data It accepts 4 values, left (l), justify (j), center (c), and right (r).

bg\_data and fg\_data accepts int values from -1 to 256. Default value is -1 or 256.

```
#-----  
# Horizontal Line Section  
#-----  
top_horizontal_line_chr = "-"      bottom_horizontal_line_chr = "-"      middle_horizontal_line_chr = "-"  
top_horizontal_line_on  = True      bottom_horizontal_line_on  = True      middle_horizontal_line_on  = False  
bold_horizontal_line    = False      bg_horizontal_line         = -1         fg_horizontal_line         = -1
```

middle\_horizontal\_line\_on These are the lines below the data. Check **Case 9:** for reference.

bg\_horizontal\_line and fg\_horizontal\_line accepts int values from -1 to 256. Default value is -1 or 256.

For more reference check Figure 1.



```
#-----
# Vertical Line Section -
#-----
bold_vertical_line = False          left_vertical_line_chr = "|"
bg_vertical_line   = -1             middle_vertical_line_chr = "|"
fg_vertical_line   = -1             right_vertical_line_chr = "|"
```

`middle_vertical_line_chr` A string type. The char used to make the horizontal line. For more reference check Figure 2.  
`right_vertical_line_chr` A string type. Refer to Figure 1.  
`left_vertical_line_chr` A string type. Refer to Figure 1.  
`bg_vertical_line` and `fg_vertical_line` accepts int values from -1 to 256. Default value is -1 or 256.

```
#-----
# External Corner Section -
#-----
top_left_corner_chr = "+"          bottom_right_corner_chr = "+"          bold_corner_chr = False
top_right_corner_chr = "+"         bottom_left_corner_chr = "+"         bg_corner_chr = -1
                                         fg_corner_chr = -1
```

`top_left_corner_chr` A string type. For reference check Figure 1. By default set to “+”  
`top_right_corner_chr` A string type. For reference check Figure 1. By default set to “+”  
  
`bottom_right_corner_chr` A string type. For reference check Figure 1. By default set to “+”  
`bottom_left_corner_chr` A string type. For reference check Figure 1. By default set to “+”

`bg_corner_chr` and `fg_corner_chr` accepts int values from -1 to 256. Default value is -1 or 256.

```
#-----
# Middle Corner Section -
#-----
bold_inner_corner_chr = False       middle_top_corner_chr = "+"          right_lateral_corner_chr = "+"
bg_inner_corner_chr = -1            middle_inner_corner_chr = "+"         left_lateral_corner_chr = "+"
fg_inner_corner_chr = -1            middle_bottom_corner_chr = "+"
```

`bg_corner_chr` and `fg_corner_chr` accepts int values from -1 to 256. Default value is -1 or 256.

For reference check Figure 3 and 4.

```
#-----
# Header Section -
#-----
align_header = "justify"           hidden_header = False                inverse_header = False
bold_header = False                italic_header = False                blinking_header = False
bg_header = -1                    strike_header = False                underline_header = False
fg_header = -1                    dim_header = False                  bg_all_cell_header = True
```

`bg_all_cell_data` The bg color will affect the entire cell or just the header.  
`align_header` It accepts 4 values, left (l), justify (j), center (c), and right (r).  
`bg_header` and `fg_header` accepts int values from -1 to 256. Default value is -1 or 256.

#### Attributes for the header lines

```
bold_vertical_header_line_chr = False    right_vertical_header_line_chr = "|"
bg_vertical_header_line_chr = -1         left_vertical_header_line_chr = "|"
fg_vertical_header_line_chr = -1         middle_vertical_header_line_chr = "|"
```

For reference check Figure 3 and 4.

#-----  
# Header Under Line Section -  
#-----

**Attributes for the line below the header text**

`bold_under_line_header` = False                      `horizontal_line_under_header_on` = False  
`bg_under_line_header` = -1                            `horizontal_line_under_header_chr` = "-"  
`fg_under_line_header` = -1

`horizontal_line_under_header_on` horizontal line between headers and the first data row.  
`bg_under_line_header` and `fg_under_line_header` accepts int values from -1 to 256. Default value is -1 or 256.

**Attributes for the header corners (left, middles and right)**

`bold_corner_under_line_header` = False                      `left_corner_under_line_header_chr` = "+"  
`bg_corner_under_line_header` = -1                            `right_corner_under_line_header_chr` = "+"  
`fg_corner_under_line_header` = -1                            `middle_corner_under_line_header_chr` = "+"

For more reference see figure 3.

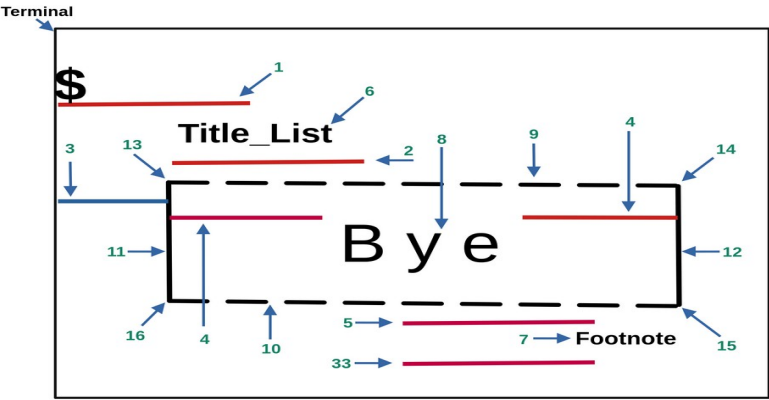


Figure 1

1.- adj_top_margin	2.- top_space	3.- adj_indent
4.- adj_space	5.- bottom_space	6.- msg_title
7.- msg_footnote	8.- data	9.- top_horizontal_line_chr
10.- bottom_horizontal_line_chr	11.- left_vertical_line_chr	12.- right_vertical_line_chr
13.- top_left_corner_chr	14.- top_right_corner_chr	15.- bottom_right_corner_chr
16.- bottom_left_corner_chr	33.- adj_bottom_margin	

17.- middle_top_corner_chr
18.- middle_vertical_line_chr
19.- middle_bottom_corner_chr

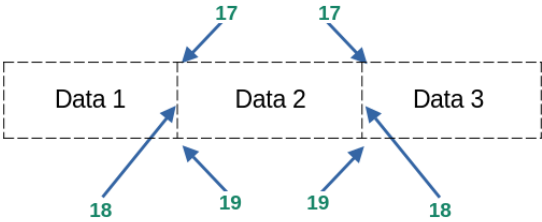


Figure 2

20.- header
21.- horizontal_line_under_header_chr
22.- left_vertical_header_line_chr
23.- right_vertical_header_line_chr
24.- left_corner_under_line_header_chr
25.- right_corner_under_line_header_chr
26.- middle_horizontal_line_chr
27.- left_lateral_corner_chr
28.- right_lateral_corner_chr

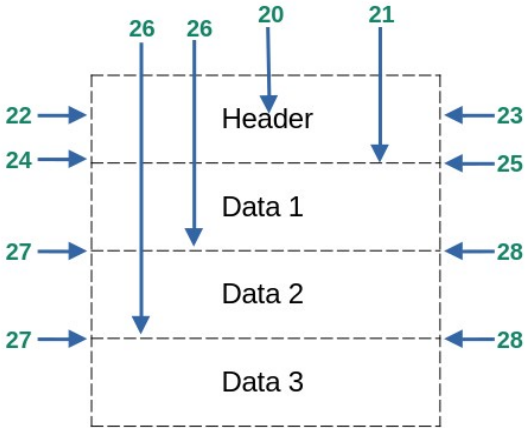


Figure 3

29.- middle_vertical_header_line_chr
30.- middle_corner_under_line_header_chr
31.- middle_inner_corner_chr
32.- set_fill_chr

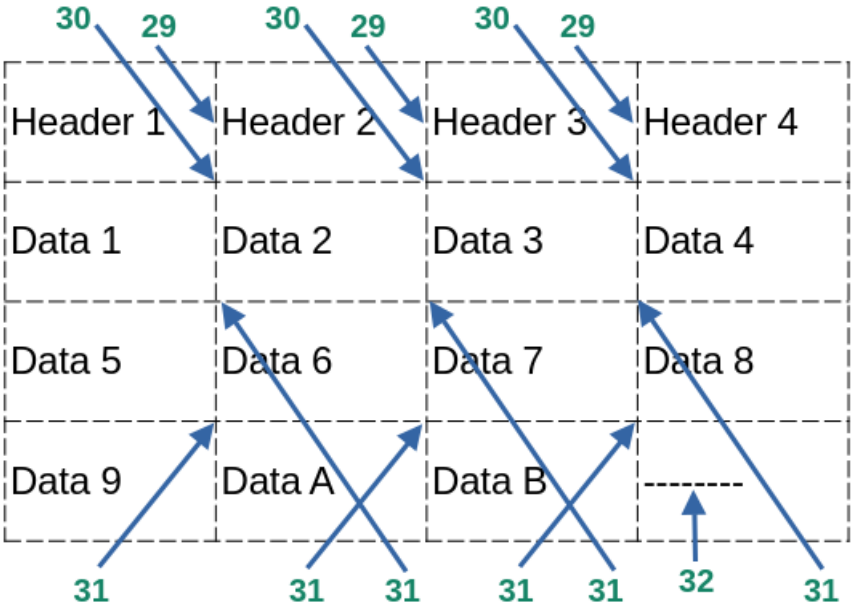


Figure 4

Summarize

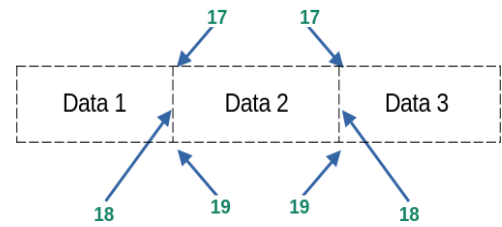
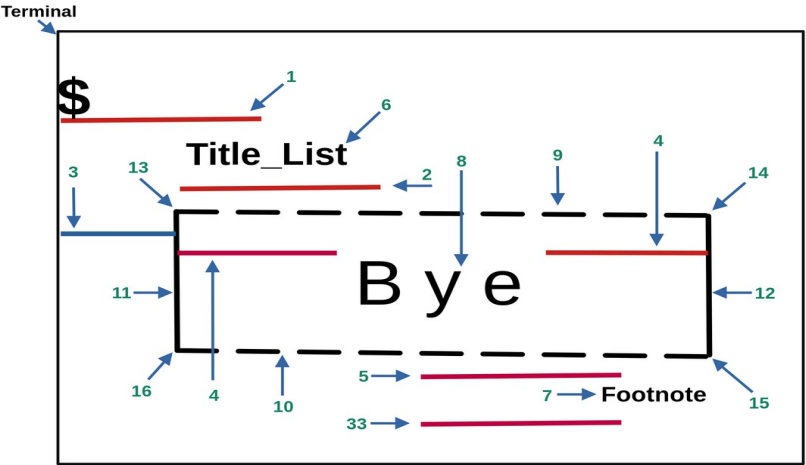


Figure 2  
Figure 1

**Note:** 2 and 33 only works if they exist (title and footnote)

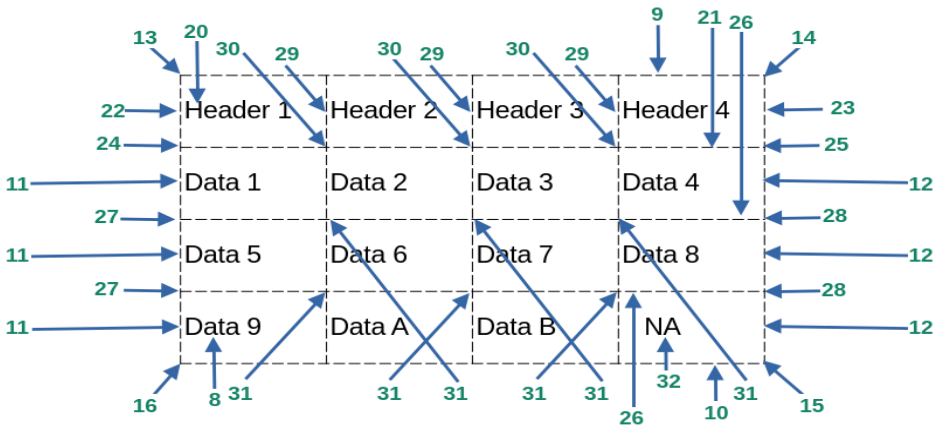


Figure 5

1.- adj_top_margin	2.- top_space	3.- adj_indent
4.- adj_space	5.- bottom_space	6.- msg_title
7.- msg_footnote	8.- data	9.- top_horizontal_line_chr
10.- bottom_horizontal_line_chr	11.- left_vertical_line_chr	12.- right_vertical_line_chr
13.- top_left_corner_chr	14.- top_right_corner_chr	15.- bottom_right_corner_chr
16.- bottom_left_corner_chr	17.- middle_top_corner_chr	18.- middle_vertical_line_chr
19.- middle_bottom_corner_chr	20.- header	21.- horizontal_line_under_header_chr
22.- left_vertical_header_line_chr	23.- right_vertical_header_line_chr	24.- left_corner_under_line_header_chr
25.- right_corner_under_line_header_chr	26.- middle_horizontal_line_chr	27.- left_lateral_corner_chr
28.- right_lateral_corner_chr	29.- middle_vertical_header_line_chr	30.- middle_corner_under_line_header_chr
31.- middle_inner_corner_chr	32.- set_fill_chr	33. adj_bottom_margin

Default Horizontal Line Values:

top\_horizontal\_line\_on = 1

bottom\_horizontal\_line\_on = 1

middle\_horizontal\_line\_on = 0

horizontal\_line\_under\_header\_on = 0

Examples:

Demo 1 Default Values

```
import fancyprint as fp

tlb = fp.FancyFormat()
lst = [
    ["Header 1", "Header 2", "Header 3", "Header 4"],
    ["R2C1", "R2C2", "R2C3", "R2C4"],
    ["R3C1", "R3C2", "R3C3", "R3C4"],
    ["R4C1", "R4C2", "R3C3", "R3C4"],
    ["R3C1", "R3C2"]
]

tlb.print_fancy_format(lst)
```

Header 1	Header 2	Header 3	Header 4
R2C1	R2C2	R2C3	R2C4
R3C1	R3C2	R3C3	R3C4
R4C1	R4C2	----	----

Demo 2 A Little of Customization

```
import fancyprint as fp

tlb = fp.FancyFormat()
lst = [
    ["Header 1", "Header 2", "Header 3", "Header 4"],
    ["R2C1", "R2C2", "R2C3", "R2C4"],
    ["R3C1", "R3C2", "R3C3", "R3C4"],
    ["R4C1", "R4C2"]
]

tlb.msg_title = " Title List "
tlb.bold_title = True
tlb.fg_title = 21
tlb.bg_title = 231

tlb.bg_header = 90
tlb.fg_header = 231
tlb.horizontal_line_under_header_on = True

tlb.align_data = fp.Align.CENTER
tlb.fg_data = 14

tlb.msg_footnote = " Footnote List "
tlb.align_footnote = fp.Align.RIGHT
tlb.bold_footnote = True
tlb.bg_footnote = 231
tlb.fg_footnote = 21

tlb.print_fancy_format(lst)

lst = [
    ["Header"],
    ["R2C1"],
    ["R3C1"],
    ["R4C1"]
]

tlb.print_fancy_format(lst, fp.Line_Style.SINGLE)
```

Title			
Header 1	Header 2	Header 3	Header 4
R2C1	R2C2	R2C3	R2C4
R3C1	R3C2	R3C3	R3C4
R4C1	R4C2	----	----
Footnote			

Title
Header
R2C1
R3C1
R4C1
Footnote

demo00.py → Type of Variables

<div><div>int</div><div>+-----+</div><div>  2547  </div><div>+-----+</div><div>Case 1</div></div>	<div><div>bool</div><div>+-----+</div><div>  True  </div><div>+-----+</div><div>Case 0</div></div>	
<div><div>str</div><div>+-----+</div><div>  Hello There  </div><div>+-----+</div><div>Case 4</div></div>	<div><div>complex</div><div>+-----+</div><div>  45.8+698.0j  </div><div>+-----+</div><div>Case 3</div></div>	<div><div>float</div><div>+-----+</div><div>  25.987  </div><div>+-----+</div><div>Case 2</div></div>
	<div><div>complex</div><div>+-----+</div><div>  (45.9+25j)  </div><div>+-----+</div><div>Case 3</div></div>	
<div><div>Range Data</div><div>+-----+</div><div>  0   2   4   6   8   10   12   14  </div><div>+-----+</div><div>Case 5</div></div>		
<div><div>Dictionary</div><div>+-----+</div><div><div>Keys</div><div>NAME</div><div>LAST_1</div><div>LAST_2</div></div><div><div>Values</div><div>Miguel</div><div>Aguilar</div><div>Cuesta</div></div></div> <div>+-----+</div> <div>Case 6</div>		<div><div>Range Data</div><div>+-----+</div><div>Header</div><div>0</div><div>2</div><div>4</div><div>6</div><div>8</div><div>10</div><div>12</div><div>14</div></div> <div>+-----+</div> <div>Case 5</div>

Demo 4 Some More Customization

Header 1	Header 2	Header 3	Header 4
Data 1	Data 2	Data 3	Data 4
Data 5	Data 6	Data 7	Data 8
Data 9	Data A	Data B	----

## Two List Joined

+ - - - - - +	+ - - - - - +	+ - - - - - +	+ - - - - - +
Header 1	Header 2	Header 3	Header 4
Data 1	Data 2	Data 3	Data 4
Data 5	Data 6	Data 7	Data 8
Data 9	Data A	Data B	----
+ - - - - - +	+ - - - - - +	+ - - - - - +	+ - - - - - +
Header 1	Header 2	Header 3	Header 4
Data 1	Data 2	Data 3	Data 4
Data 5	Data 6	Data 7	Data 8
Data 9	Data A	Data B	----
+ - - - - - +	+ - - - - - +	+ - - - - - +	+ - - - - - +

### Pen Class

This class contains two methods.

`draw_line(size, layout, tail, body, head)`

`draw_rectangle(length, width, style)`

### Rectangle Default Values

`top_left_corner_chr = "+"`

`top_right_corner_chr = "+"`

`bottom_right_corner_chr = "+"`

`bottom_left_corner_chr = "+"`

`top_horizontal_line_chr = "-"`

`bottom_horizontal_line_chr = "-"`

`refill_bg_color = False`

`right_vertical_line_chr = "|"`

`left_vertical_line_chr = "|"`

### Line Default Values

`bold_draw_line = False`

`bg_draw_line = -1`

`fg_draw_line = -1`

### General Default Values

`adj_indent = 0`

`draw_line(size=0, layout, tail, body, head)`

`draw_rectangle(length=3, width=3, style=Line_Style.DASH)pen.adj_indent = 8`

### Example:

```
import fancyprint as fp
```

```
pen = fp.Pen()
```

```
pen.draw_line(size=20, layout=fp.Layout.HORIZONTAL, tail=fp.Unicode.BLACK_LEFT_POINTING_TRIANGLE,  
              body=fp.Unicode.EM_DASH, head=fp.Unicode.BLACK_RIGHT_POINTING_TRIANGLE)
```

```
print()
```

```
pen.adj_indent = 14
```

```
pen.draw_rectangle(length=8, width=4, style=fp.Line_Style.DOUBLE)
```

