**00\_INFO\_PYTHON**

**00-07 PROJECTS**

**ANSI Escape Code:**

<https://gist.github.com/fnky/458719343aabd01cfb17a3a4f7296797>

This link is to find ANSI Escape codes to add bold, italic, colors, decimal, etc in programming by code.

**Project 01:**

Create a function of Add Two Numbers, and taking numbers by user and set the number as string then print the total, also set boiler plate at the end of the code and then call the function.

**Project 02:**

Create a function of Agreement Bot which is taking information from user and then print it its input in a sensible sentence. Then use boiler plate and call the function at the end of the code. We have to set user input as a bold and italic format by using ANSI Escape Code, make sure when we use ANSI code so we have to enclosed them from the start to end.

**Project 03:**

Create a function which is converting from Fahrenheit into Celsius, this can be a number in decimal places. Take a input temperature from user.

**This is the provided equation/formula from GIAIC:**

The equation you should use for converting from Fahrenheit to Celsius is the following:

degrees\_celsius = (degrees\_fahrenheit - 32) \* 5.0/9.0

(Note. The .0 after the 5 and 9 matters in the line above!!!)

Here's a sample run of the program (user input is in bold italics):

Enter temperature in Fahrenheit: 76

Temperature: 76.0F = 24.444444444444443C

**Project 04:**

Create a program which name is **04-HOW OLD ARE THEY: Find the Age of 5 Friends.**

Anton, Beth, Chen, Drew and Ethen are the friends and the age of all them which is Anton is 21 and Beth is 6years older than Anton and Chen is 20 years older than Beth, Drew is as old as Chen’s age plus Anton’s age, Ethen is same age as Chen.

Solve the age riddle by python coding.

**Project 05:**

Create a Program: prompt a user to enter length of each side of triangle and calculate then print the parameter of triangle (the sum of all of the side lengths). User input must be bold and italic.

**Project 06:**

Create a program which is ask the number from user and the user number print its square. User’s input must be in bold and italic format.

**Require square of 4.**

**Result must be 16.**

**ANSI Escape Code**

**ANSI Escape Codes for Terminal Formatting**

ANSI escape codes are sequences of characters used to control text formatting, colors, and cursor movement in terminal displays. These codes work on Linux, macOS, and some Windows terminals.

**Why Use ANSI Escape Codes?**

* Change text **color**
* Apply **bold**, *italic*, or **underline**
* Reset formatting after applying styles

**Basic ANSI Escape Codes**

| **Code** | **Effect** |
| --- | --- |
| \033[0m | Reset formatting |
| \033[1m | Bold text |
| \033[3m | Italic text |
| \033[4m | Underline text |
| \033[31m | Red text |
| \033[32m | Green text |
| \033[33m | Yellow text |
| \033[34m | Blue text |
| \033[1;33m | Bold + Yellow |
| \033[1;34m | Bold + Blue |

**Example Usage in Python**

print("\033[1;34mBold Blue Text\033[0m") # Bold Blue

print("\033[3;31mItalic Red Text\033[0m") # Italic Red

print("\033[4;32mUnderlined Green Text\033[0m") # Underlined Green

**Output:**

🔵 **Bold Blue Text**  
🔴 *Italic Red Text*  
🟢 **Underlined Green Text**

**Why Use \033[0m?**

If you don't reset formatting using \033[0m, the applied style may continue affecting subsequent texts in the terminal.

**Example Without Reset:**

print("\033[1mBold Text!")

print("Normal Text") # This will also be bold!

**Example With Reset:**

print("\033[1mBold Text!\033[0m")

print("Normal Text") # Now it's normal

**More Color Codes**

| **Code** | **Color** |
| --- | --- |
| \033[30m | Black |
| \033[31m | Red |
| \033[32m | Green |
| \033[33m | Yellow |
| \033[34m | Blue |
| \033[35m | Magenta |
| \033[36m | Cyan |
| \033[37m | White |

**Conclusion**

ANSI escape codes provide a simple way to enhance terminal output. They allow developers to highlight important information, structure outputs, and improve readability.