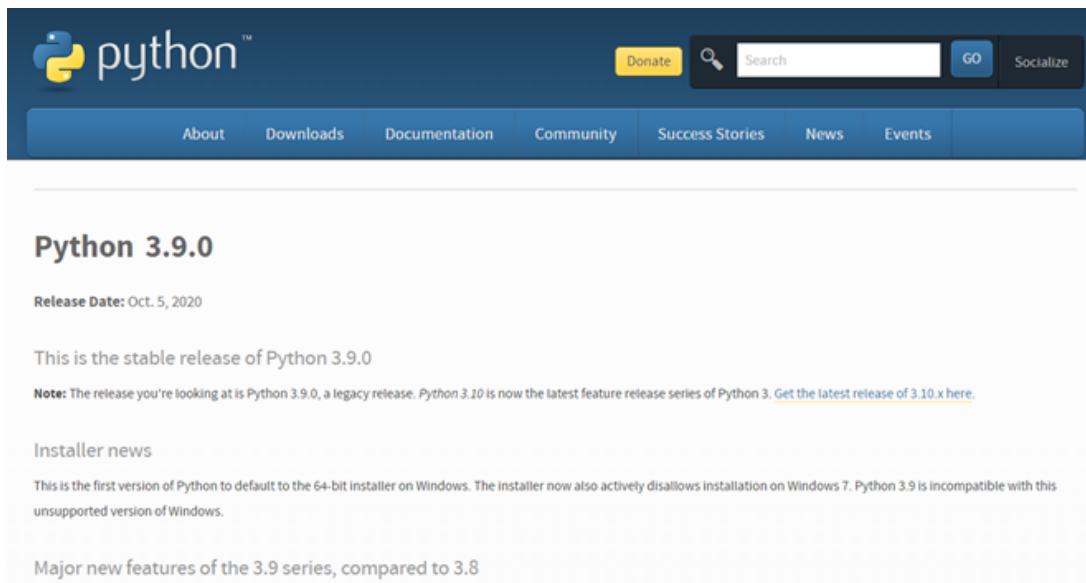


CS 130 CODE FOR TABULATION METHOD QUINE-MCCLUSKEY METHOD:

By: Dorado, Abram & Malimban, Kristine Jewel

User's Manual:

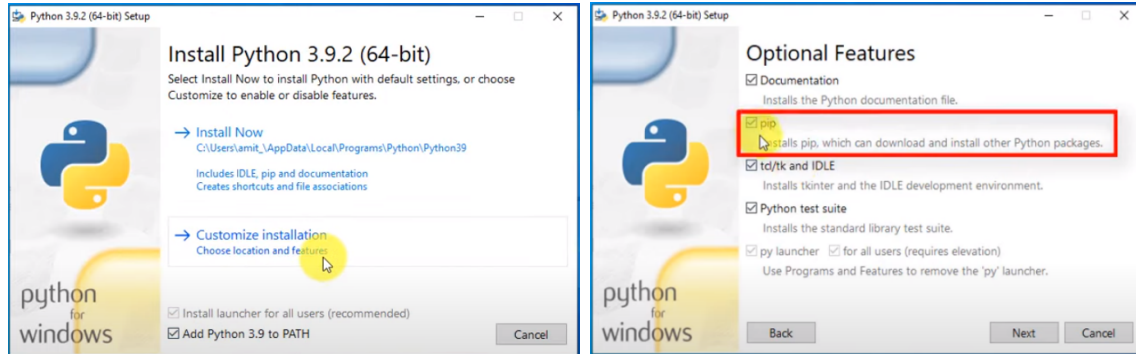
1. Download install Python specifically version 3.9.0 for this version is compatible for the GUI,Kivy. <https://www.python.org/downloads/release/python-390/>



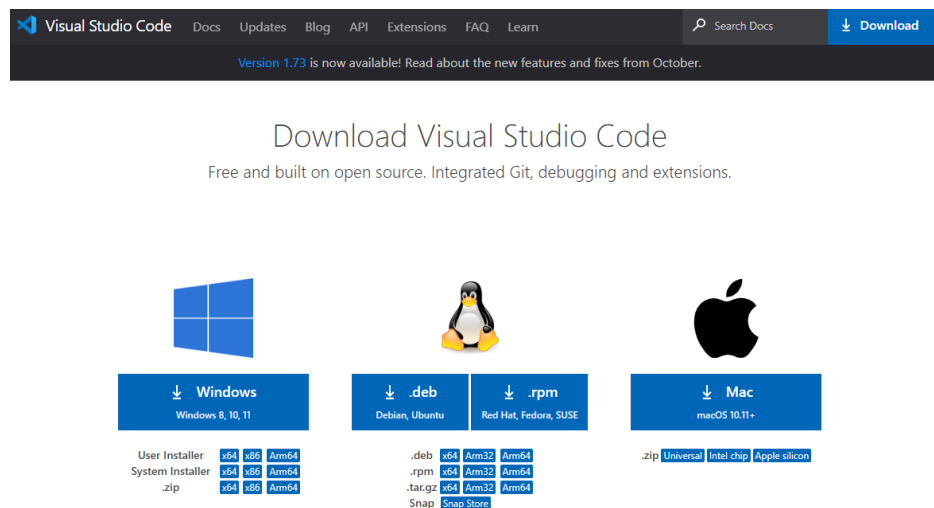
Scroll Down and look for the installer that is compatible with your machine. In our case we used [Windows x86 executable installer](#). Download the file and install.

Files					
Version	Operating System	Description	MD5 Sum	File Size	GPG
Gzipped source tarball	Source release		e19e75ec81dd04de27797bf3f9d918fd	26724009	SIG
XZ compressed source tarball	Source release		6ebfe157f6e88d9eabfbaf3fa92129f6	18866140	SIG
macOS 64-bit installer	macOS	for OS X 10.9 and later	16ca86fa3467e75bade26b8a9703c27f	31132316	SIG
Windows help file	Windows		9ea6fc676f0fa3b95af3c5b3400120d6	8757017	SIG
Windows x86-64 embeddable zip file	Windows	for AMD64/EM64T/x64	60d0d94337ef657c2cca1d3d9a6dd94b	8387074	SIG
Windows x86-64 executable installer	Windows	for AMD64/EM64T/x64	b61a33dc28f13b561452f3089c87eb63	28158664	SIG
Windows x86-64 web-based installer	Windows	for AMD64/EM64T/x64	733df85afb160482c5636ca09b89c4c8	1364352	SIG
Windows x86 embeddable zip file	Windows		d81fc534080e10bb4172ad7ae3da5247	7553872	SIG
Windows x86 executable installer	Windows		4a2812db8ab9f2e522c96c7728cfcccb	27066912	SIG
Windows x86 web-based installer	Windows		cd8fa799e6760c13d06d0c2374110aa3	1327384	SIG

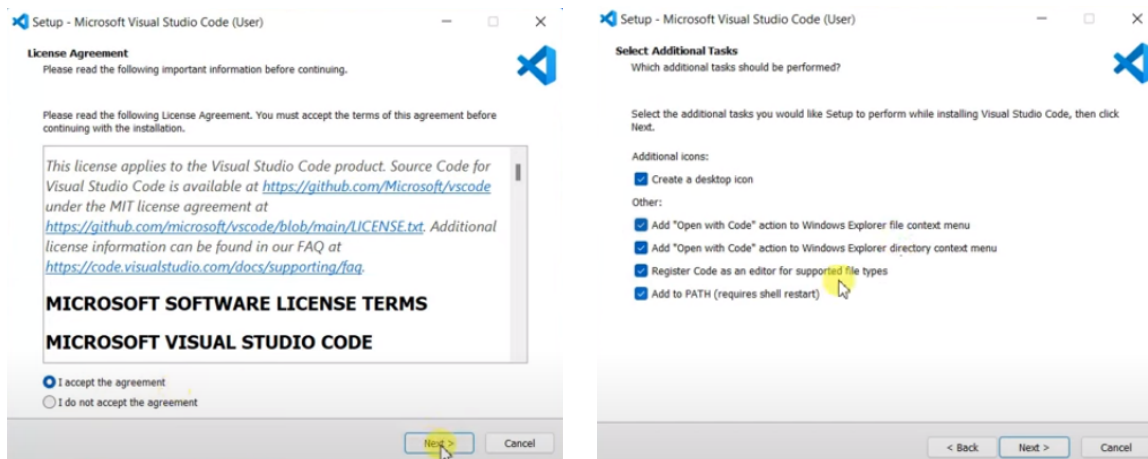
In the installation process, click Customize installation to make sure that the “pip” box is checked. Then click next and install.



2. If you haven't done it already Install your chosen IDE that is compatible with your machine. (for this project we used vscode). <https://code.visualstudio.com/download>



Proceed with the regular process of installing a program. Click your preferred file location and custom options in the installation of vscode.



3. Download and install Kivy and KivyBuilder in the terminal/command prompt. Open the terminal and type this command:

```
To install the latest cutting-edge Kivy from master, instead do:  
  
python -m pip install "kivy[base] @ https://github.com/kivy/kivy/archive/master.zip"
```

Also type this command:

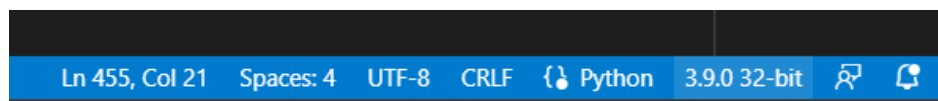
```
pip install --upgrade pip setuptools wheel
```

And lastly, type this command:

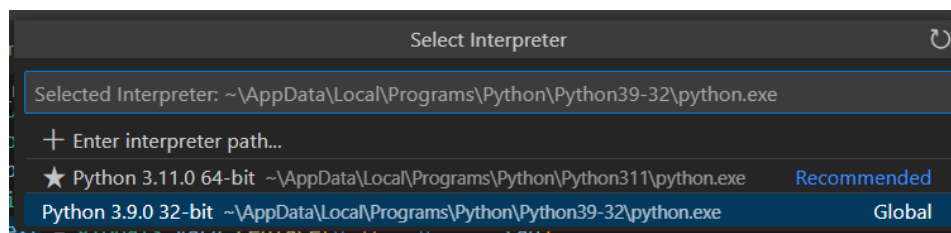
```
pip install kivymd
```

Then we are done installing the kivy in our machine.

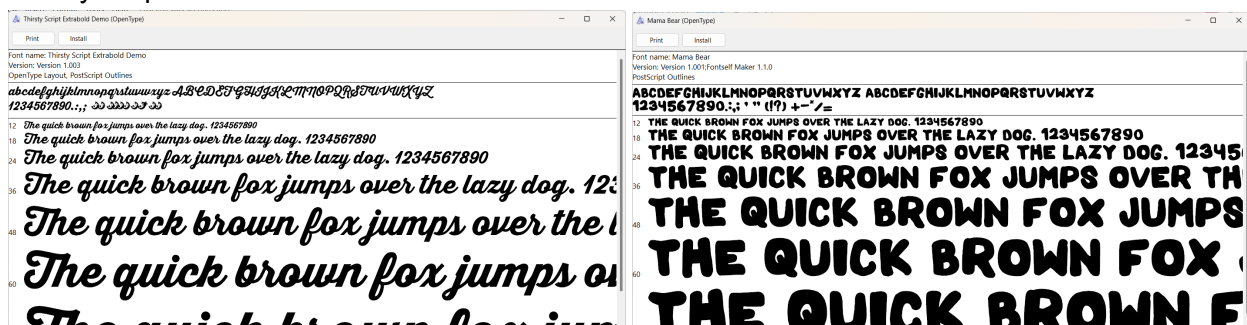
4. When using VScode, if it prompts/ selects the latest version of python through its built-in extensions, change it to the global version.



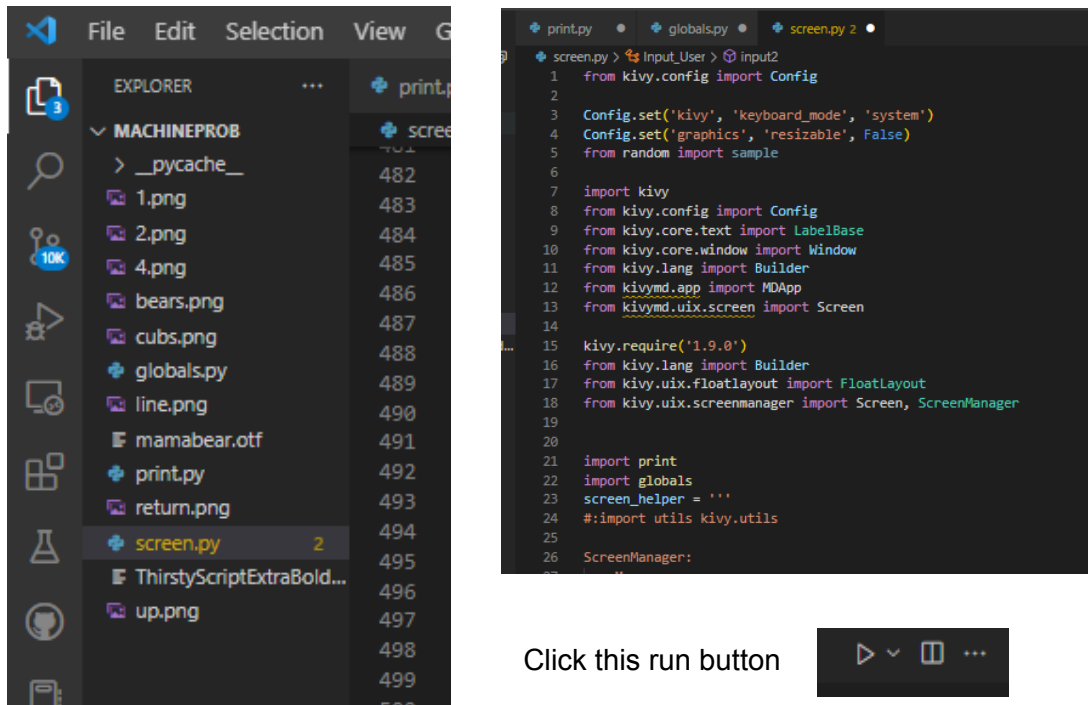
Locate this in the upper right portion and select global.



5. Install the fonts from the folder to assure that the GUI will be displayed as is. font names are: ThirstyScriptExtraBoldDemo.otf and MamaBear.otf



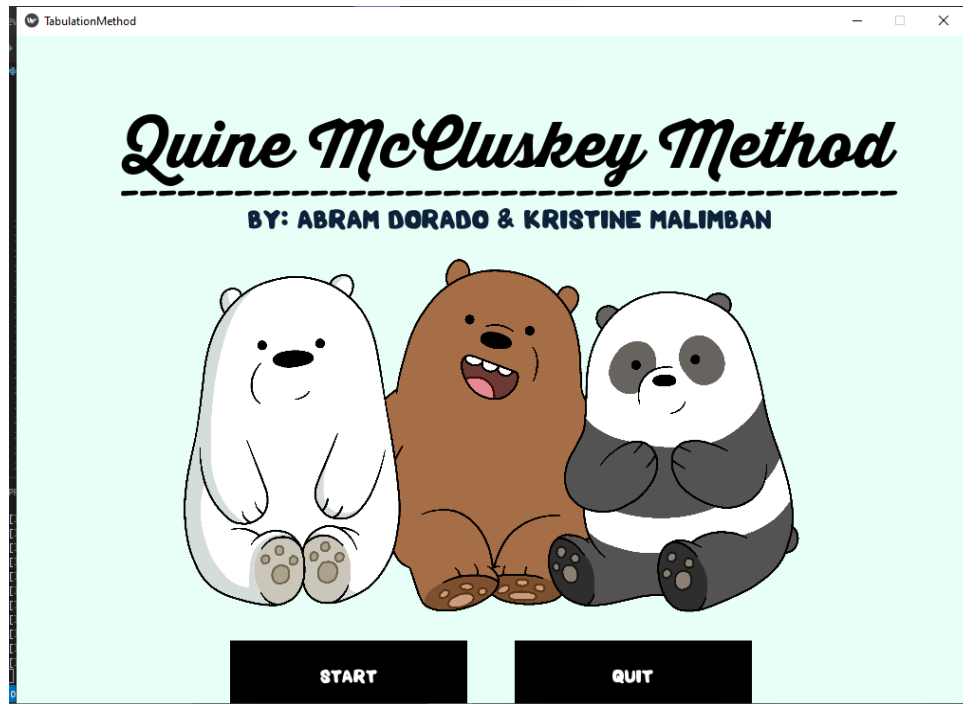
5. Open the folder of the code in your IDE (File > Open Folder > select your folder) and go to screen.py then run the code. The GUI window will pop up and you can now use the program.



If you still don't have the run button in your vscode, go to the extension on the left side of the panel and search for code runner, then install. This will let you run your code faster just by clicking the icon without you having to type in the terminal for execution.




6. After running the screen.py (GUI code), a pop-up window will appear and the tabular method or Quine McCluskey program will now run.



(Starting page)

(2nd screen for inputting the values of minterms, don't care conditions, chosen variable, number of variable)



F

I

R

S

T


T

A


B

L


E




GROUP NO.	MINTERMS	BINARY OF MINTERMS
1:		
	1	0001
	4	0100
	8	1000
2:		
	6	0110
	9	1001
	10	1010
3:		
	7	0111
	11	1011
4:		
	15	1111



AGAIN




NEXT



QUIT

UNMARKED ELEMENTS(PRIME IMPLICANTS) OF TABLE 1:
NONE

(Results for the 1st table)



N

E

X

T


T

A

B

L

E




GROUP NO.	MINTERMS	BINARY OF MINTERMS
0:		
	1,9	-001
	4,6	01-0
	8,9	100-
	8,10	10-0
1:		
	6,7	011-
	9,11	10-1
	10,11	101-
2:		
	7,15	-111
	11,15	1-11


UNMARKED ELEMENTS(PRIME IMPLICANTS) OF TABLE 2:
-111, 01-0, 011-, 1-11, -001.

GROUP NO.	MINTERMS	BINARY OF MINTERMS
0:		
	8,9,10,11	10--


UNMARKED ELEMENTS(PRIME IMPLICANTS) OF TABLE 3:
10--.



RETURN




NEXT




QUIT

(Results for the next table)



FINAL

TABLE



STATUS OF EACH TABLE:

UNMARKED ELEMENTS(PRIME IMPLICANTS) OF TABLE 1:
NONE

UNMARKED ELEMENTS(PRIME IMPLICANTS) OF TABLE 2:
-111, 01-0, 011-, 1-11, -001.

UNMARKED ELEMENTS(PRIME IMPLICANTS) OF TABLE 3:
10--.


ALL PRIME IMPLICANTS: -111, 01-0, 10--, -001, 011-, 1-11

PRIME IMPLICANTS CHART:


MINTERMS	
7, 15	- - - x - - - x
4, 6	- x x - - - - -
8, 9, 10, 11	- - - - x x x x -
1, 9	x - - - - x - - -
6, 7	- - x x - - - -
11, 15	- - - - - x x

ESSENTIAL PRIME IMPLICANTS: 01-0, 10--, -001

SOLUTION: $F = BCD + A'BD' + AB' + B'C'D$



RETURN



QUIT

(Results for the Final table and the Simplified equation)