**REPORT: SIMPLE CALCULATOR PROGRAM WITH PYTHON**

Using visual studio code as the Integrated Development Environment (IDE) and python as the programming language, we were able to design a basic arithmetic calculator with some basic arithmetic operation like Addition (+), Subtraction (-), multiplication (x) and Division (/).

**MODULES USED:**

The Tkinter module is graphical user interfaces (GUI) programmed directly into python; it provides all the basic functionality for creating graphical user interfaces.

**TKINTER LAYOUT MANAGERS USED:**

* Pack( )
* Grid( )

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| 1 | Project name | Basic Arithmetic Calculator |
| 2 | Project IDE | Visual Studio Code |
| 3 | Programming Language | Python |
| 4 | Python Modules used | Tkinter |

**PSEUDOCODE OF THE PROGRAM:**

* Import the Tkinter module
* Creating a global variable called expression to store the result of the calculation.
* Created two functions to update and evaluate the variable “expression” .
* Created a GUI window using root (root = Tk( ) )
* Defining the variable expression using the global keyword and assigning it an empty string value (“”)
* Creating two functions to update and evaluate the expression
* The buttonClick function updates the contents of the text entry box while equalpress evaluates the final result of the calculation.
* Using grid to produce a table-like-structure with columnspan, padx and rowspan to specify how many rows, number of columns per row respectively. Columnspan = 4. Root geometry to 350x300
* Root title to “my\_calculator”.
* The code starts with a few basic objects; a button object, which has properties for text, font, background colour, fg and command; and a grid object.
* Note: each button has an associated command to it. When a user press a button like 7, the numeric value 7 is encoded to the button 7 and so it continues.
* Duplicate the command code for Button 2,3,4,5,6,7,8,9,0,+,-,x and decimal (.).
* End root windows with root.mainloop ( ).