**Calculator**

**Introduction:-**

Simple calculator is a project to allow users to calculate basic four operations in mathematics, they are addition, subtraction, multiplication, division but in this Project which I'm Implementing, also included three additional operations such as Factorial, Power, modules. However, the input has to be in the form "number1 operator1 number2 "(i.e 2+4).

The input includes the command such as we can give numbers based on the operation for example for addition we give 1 as a command and that particular operation works. Moreover, this calculator is smart enough to operate multiplication/division before addition/subtraction/factorial/power/modules, in another word it is implemented with the order of precedence logic.

**Research:-**

<https://www.programiz.com/c-programming/examples/calculator-switch-case>

<https://www.knowprogram.com/c-programming/simple-calculator-program-c>

The switch-case statement is used to write a simple calculator program in C language. The remainder operator % is normally used with data values. To print the remainder operator %% is used in the first printf() function. The variable ch store the operator, similarly the variables num1, and num2 stores the two numbers. The switch has condition “ch” so the entered operator is matched with which case label those case label statements are executed, and display result to the screen. If the entered operator is not matched with the case labels then the default statement will be executed and it will display the message “Error! Invalid Operator.” to the screen.

**Swot Analysis**

**STRENGTHS**

The ultimate strength Calculators is its innovative, user-friendly and long lasting etc..

**WEAKNESSES**

do not include all the operations rather have only addition, subtraction multiplication, division, modules, power and factorial.

**OPPORTUNITIES**

The tech-based market has a huge opportunities in capturing the youth market. And this calculator comparatively already one step ahead than other

**THREATS**

The slower growth in technological innovation will also bring a significant threat in the upcoming dynamic world.

**HIGH LEVEL REQUIREMENTS:-**

| **ID** | **Description** | **Category** |
| --- | --- | --- |
| HLR01 | User should able to viewe operation list | technical |
| HLR02 | User should able to select the operation | technical |
| HLR03 | The system sould able perform the given operation | technical |
| HLR04 | The system should provide correct result | technical |