

Calculator

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About project Calculator

A calculator program provides the functionality of a calculator on a computer. It allows users to perform arithmetic operations through a CLI similar to a physical calculator.

Features

1. Supports addition, subtraction, multiplication, and division operations.
2. Handles both integer and floating-point numbers.
3. Accepts multiple inputs in a single command.
4. Provides a clear and concise output of the calculated result.
5. Supports parentheses for grouping expressions and controlling the order of operations.

Tech stack used in Calculator

1. Programming Languages – JavaScript
2. Runtime Environment – Node.js

Proposed Solution

Procedure

Installing axios, readline-sync , cli-color packages

Importing packages

```
import readline from "readline-sync";  
import color from "cli-color";
```

Using Cli-color package, naming the cli package codes to the new color variables

```
const purple = color.xterm(92).bgXterm(147)  
const blue = color.xterm(153)  
const pink = color.xterm(212)  
const peach = color.xterm(224)  
const lime = color.xterm(229)
```

```

let a,b;

function inputa(){
  a = readline.question(peach("Enter 1st num: "))
  if(Number(a)){
    inputb()
  }
  else{
    console.log(peach("not a number"))
    inputa()
  }
}

function inputb(){
  b = readline.question(peach("Enter 2nd num: "))
  if(Number(b)){
    console.log(lime("-----"))
    operator()
  }
  else{
    console.log(peach("not a number"))
    inputb()
  }
}

```

Taking two variables a and b

Asking user two input numbers and assigning it to variables a & b. if the user input is not a returns not a number

Asking user which operation they want to perform and performing the operations chosen by the user

```
function operator(){
  let result;
  const operator = readline.question(pink("which operation do you want to perform ( +, -, * , / ) : "))
  console.log(lime("-----"))

  switch(operator){
    case '+':
      result = +a + +b;
      console.log(blue(`${a} + ${b} = ${result}`));
      break;
    case '-':
      result = a - b;
      console.log(blue(`${a} + ${b} = ${result}`));
      break;
    case '*':
      result = a * b;
      console.log(blue(`${a} + ${b} = ${result}`));
      break;
    case '/':
      result = a / b;
      console.log(blue(`${a} + ${b} = ${result}`));
      break;

    default:
      console.log('Invalid operator');
      operator()
      break;
  }
}
```

Installation of Calculator

GitHub Repository: <https://github.com/ayeshakhatoon17/Calculator>

1. Clone the repository

```
ayesha@ayesha:~$ git clone git@github.com:ayeshakhatoon17/Calculator.git
```

2. Installing dependencies & running project

```
ayesha@ayesha:~$ cd Calculator/  
ayesha@ayesha:~/Calculator$ npm i  
  
added 16 packages, and audited 17 packages in 683ms  
  
found 0 vulnerabilities  
ayesha@ayesha:~/Calculator$ npm start
```

3. Output:

```
----- Calculator -----  
-----  
Enter 1st num: 1  
Enter 2nd num: 84  
-----  
which operation do you want to perform ( +, -, * , / ) : /  
-----  
1 / 84 = 0.011904761904761904  
ayesha@ayesha:~/Calculator$
```