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# Web based simple calculator



### **NOTES:**

- The calculator is implemented using angular framework for frontend and all calculation are done on the server side using spring-boot framework.
- The buttons of the calculator are web buttons.
- Assumption: The calculator is a simple calculator that execute only one command then you must clear the screen to execute another calculation.
- The inputs are divided into 2 cases:
  - 1.One operator and one operand (inverse/square root/power 2)
  - 2.One operator and 2 operands (add/sub/mult/div/mod)
- Errors like division by zero, the inverse of a zero or any other error like multiple operands or any false syntax in handled by showing "ERROR" on the screen.

# **User manual:**

# 1.Equal



Equal button is used to evaluate any valid expression then show the result on screen.

#### 2.ADD



Add button is used to add 2 numbers then press equal sign to show the result.

15.0

### 3.Subtract



Subtract button is used to subtract 2 numbers then press equal sign to show the result.

200.0

# 4. Multiply



Multiply button is used to multiply 2 numbers then press equal sign to show the result.

8 x 9

72.0

### 5. division



Division button is used to divide 2 numbers then press equal sign to show the result.

88 div 11

8.6

#### 6.modulo



Modulo button is used to get the remainder of the division of 2 numbers then press equal sign to show the result.

7 mod 3

1.0

#### 7.inverse



Inverse button is used to get the inverse of a given number then press equal sign to show the result.

inv( 10

0.1

# 8.power2



power2 button is used to get the number^2 then press equal sign to show the result.

pow^2( 5

25.0

# 9.square root



Sqrt button is used to get the sqrt of the number then press equal sign to show the result.

sqrt( 144

12.0

# 10.negative



Negative button is used to get the negative of the number then complete the expression and other operations then press equal sign to show the result



#### 11.Clear



Clear button is used after every operation to clear the screen and the calculator is ready after that to execute another evaluation

222.577855



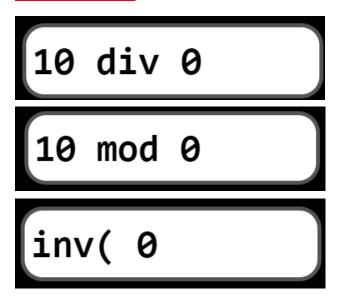
#### 12.delete



Delete button is used to delete the last element from the right whatever it was a number or an operator

(After pressing delete button three time to delete all digits of the 2nd operand)

### **ERRORS**



All these errors are handled by showing "ERROR" on the screen when pressing equal sign



If the result of number is larger than 13 digits a message containing "Too large" is shown

Too large