

1. Start
2. Show a Welcome message to the user
3.  $0 \leftarrow \text{result}$
4.  $\text{""} \leftarrow \text{letter}$
5. Start the loop
  - a. Read the letter value that will be used to determine what kind of operation to calculate
  - b. If the letter is "X":
    - i. display "Thanks for using my calculator. Goodbye!"
    - ii. End the loop (go to step 6)
  - c. If the letter is "B":
    - i. display "Enter the first number: "
    - ii. Read the first number  $\leftarrow \text{num1}$
    - iii. display "Enter an operation (+, -, \*, /, %, ^): "
    - iv. Read the operator  $\leftarrow \text{operator}$
    - v. display "Enter the second number: "
    - vi. Read the second number  $\leftarrow \text{num2}$
    - vii. If the operator is "/":
      1.  $\text{num1}/\text{num2} \leftarrow \text{result}$
      2. display "The result is: " + result
    - viii. If the operator is "+":
      1.  $\text{num1} + \text{num2} \leftarrow \text{result}$
      2. display "The result is: " + result
    - ix. Else if the operator is "-":
      1.  $\text{num1} - \text{num2} \leftarrow \text{result}$
      2. display "The result is: " + result
    - x. Else if the operator is "\*":
      1.  $\text{Num1} * \text{num2} \leftarrow \text{result}$
      2. Display "The result is: " + result
    - xi. If the operator is "^":
      1.  $\text{num1} ^ \text{num2} \leftarrow \text{result}$
      2. display "The result is: " + result
    - xii. If the operator is "%":
      1.  $\text{num1} \% \text{num2} \leftarrow \text{result}$
      2. display "The result is: " + result
    - xiii. else:
      1. display "Wrong operator. Please try again."
  - d. Else:
    - i. Display "Sorry, at this time I don't have enough knowledge to serve you in this category"
  - e. Display "Please select your option (B, U, A, E, V, X): "
  - f. Go back to the start of the loop (go to step 5)
6. End of loop
7. End