**Flowchart**

**Pseudocode**

**1.**

**START**

**PRINT “Enter first Number”**

**INPUT A**

**PRINT “Enter second Number”**

**INPUT B**

**PRINT “Enter third Number”**

**INPUT C**

**MAX = A**

**IF B > MAX Then**

**MAX = B**

**ENDIF**

**IF C > MAX Then**

**MAX = C**

**ENDIF**

**PRINT “The Maximum Number is”**

**OUTPUT MAX**

**END**

**2.**

**START**

**PRINT “Enter first Number”**

**INPUT A**

**PRINT “Enter second Number”**

**INPUT B**

**PRINT “Enter third Number”**

**INPUT C**

**NEG\_A = -A**

**NEG\_B = -B**

**NEG\_C = -C**

**SUM = -(NEG\_A - NEG\_B - NEG\_C)**

**PRINT “The Sum is”**

**OUTPUT SUM**

**END**

**3.**

**START**

**PRINT “Enter first Number”**

**INPUT num1**

**PRINT “Enter second Number”**

**INPUT num2**

**PRINT “Enter your Operator: ‘+’ or ‘-‘ ”**

**INPUT OPERATOR**

**RESULT = 0**

**IF OPERATOR == '+' THEN**

**RESULT = num1 + num2**

**ELSE IF OPERATOR == '-' THEN**

**RESULT = num1 - num2**

**ELSE**

**OUTPUT "Invalid operator"**

**ENDIF**

**OUTPUT RESULT**

**END**

**Algorithm**

**1.**

**1: Ask the user to enter the number n.**

**2: Ask the user to enter the divisor Nth.**

**3: Check if Nth is a divisor of n by the following two steps:**

**If n % Nth == 0, proceed to Step 4.**

**If n % Nth != 0, display that Nth is not a divisor of n and end the algorithm.**

**4: Determine if Nth is an even or odd number by the following steps:**

**If Nth % 2 == 0, display that Nth is an even number.**

**If Nth % 2 != 0, display that Nth is an odd number.**

**5: Output the result:**

**If Nth is a divisor of n, display that Nth is a divisor of n and whether it is even or odd.**

**2.**

**1: Ask the user to enter a number between 1 and 12 (inclusive).**

**2: Read the entered number and store it in a variable, lets suppose monthNumber.**

**3: Check if monthNumber is within the valid range (1 to 12) by the following method:**

**If monthNumber is less than 1 or greater than 12, display an error message indicating that the input is invalid and end the algorithm.**

**4: Based on the value of monthNumber, determine the corresponding month by the following steps:**

**If monthNumber is 1, set monthName to "January".**

**If monthNumber is 2, set monthName to "February".**

**If monthNumber is 3, set monthName to "March".**

**If monthNumber is 4, set monthName to "April".**

**If monthNumber is 5, set monthName to "May".**

**If monthNumber is 6, set monthName to "June".**

**If monthNumber is 7, set monthName to "July".**

**If monthNumber is 8, set monthName to "August".**

**If monthNumber is 9, set monthName to "September".**

**If monthNumber is 10, set monthName to "October".**

**If monthNumber is 11, set monthName to "November".**

**If monthNumber is 12, set monthName to "December".**

**5: Display the monthName.**

**3.**

**1: Ask the user to enter the first number and store it in a variable, lets suppose num1.**

**2: Ask the user to enter the second number and store it in a variable, lets suppose num2.**

**3: Ask the user to enter the operation they want to perform (+, -, \*, /, %) and store it in a variable, lets say operation.**

**4: Check the value of operation and then perform the corresponding calculation shown in the following:**

**If operation is +:**

**Calculate the sum: result = num1 + num2**

**Display the result.**

**If operation is -:**

**Calculate the difference: result = num1 - num2**

**Display the result.**

**If operation is \*:**

**Calculate the product: result = num1 \* num2**

**Display the result.**

**If operation is /:**

**If num2 is not zero, calculate the quotient: result = num1 / num2**

**Display the result.**

**If num2 is zero, display an error message indicating division by zero is not allowed.**

**If operation is %:**

**If num2 is not zero, calculate the remainder: result = num1 % num2**

**Display the result.**

**If num2 is zero, display an error message indicating modulus by zero is not allowed.**

**5: If the operation is other than these inputs(+, -, \*, /, %), display an error message indicating an invalid operation.**