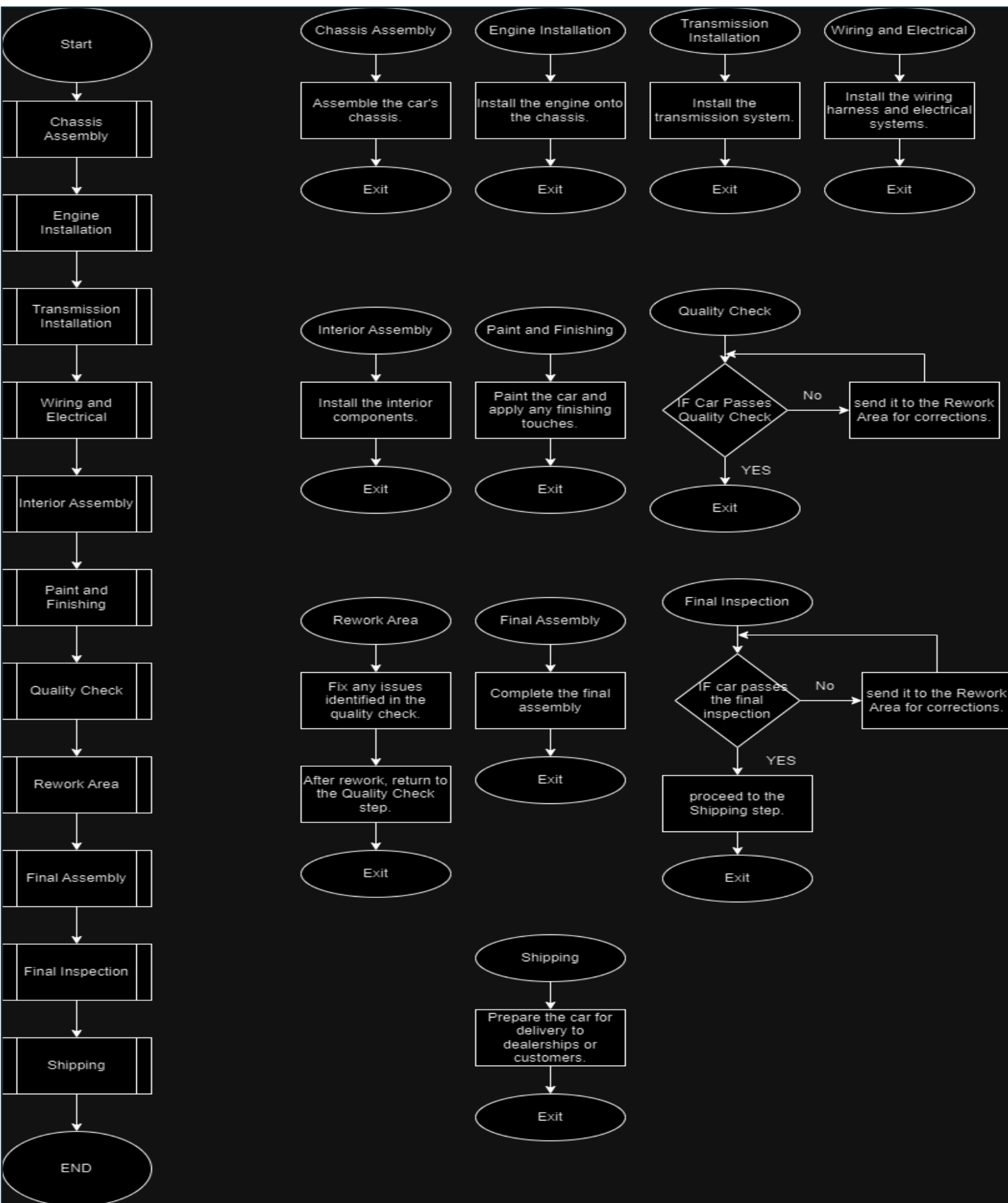


Flowchart



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: $\text{result} = \text{num1} + \text{num2}$

Display the result.

If operation is -:

Calculate the difference: $\text{result} = \text{num1} - \text{num2}$

Display the result.

If operation is *:

Calculate the product: $\text{result} = \text{num1} * \text{num2}$

Display the result.

If operation is /:

If num2 is not zero, calculate the quotient: $\text{result} = \text{num1} / \text{num2}$

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: $\text{result} = \text{num1} \% \text{num2}$

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.