**LAB 2 TASKS**

**TASK 1**:

You are working at Toyota Indus Motors and want to assemble a car. Design a flowchart with proper process modules and decision structures to replicate a pipeline

**True**

S

t

art

Read

Calc

**Until**

**Nothi**

**n**

**g**

**more to**

**assemble**

**Read**

**Getting**

**required**

**Materials for cars**

**Exit**

**Exit**

**Repeat**

**False**

**Assembling them in necessary places**

**TASK 2:**

Find the maximum number in any of three variables(PSEUDOCODE).

START

SET Number 1,Number 2,Number 3

IF Number 1>Number 2 && Number 1>Number 3

Print Number 1

ELSE IF Number 2 > Number 3 && Number 2> Number 3

Print Number 2

ELSE

Print Number 3

END

**TASK 3:**

Take three variables as input and add them without using the + operator (Use your head for this)( PSEUDOCODE)

START

SET Number 1,Number 2,Number 3

SUM Number 1-(-Number 2)-(-Number 30

Print Result(Sum)

END

**TASK 4:**

Create a small calculator which only does ‘+’ or ‘-‘Operations. (Hint: Take three variable inputs with one being used for the operator)

START

SET num1

SET num3

SET operator (+ or -)

SET num2

IF operator is '+' THEN

result = num1 + num2+ num 3

ELSE IF operator is '-' THEN

result = num1 - num2- num3

ELSE

result = "Invalid operator!"

PRINT result

END

**TASK 5:**

Implement an algorithm where the user enters a number, and an appropriate month is displayed.(Algorithm)

Ask the user to enter a number.

SET number (1-12)

* If number = 1, then display **January**.
* If number = 2, then display **February**.
* If number = 3, then display **March**.
* If number = 4, then display **April**.
* If number = 5, then display **May**.
* If number = 6, then display **June**.
* If number = 7, then display **July**.
* If number = 8, then display **August**.
* If number = 9, then display **September**.
* If number = 10, then display **October**.
* If number = 11, then display **November**.
* If number = 12, then display **December**.
* **Display the month for the user**

**TASK 6:**

Implement an algorithm for making a simple calculator with all the operators (+,-,\*,/,%)

Display a message: \**"Enter an operator (+, -, , /, %)"*

1. Take input and store it in operator
2. Display a message: **"Enter first number"**
3. Take input and store it in first number
4. Display a message: **"Enter second number"**
5. Take input and store it in second number

If operator == '+' → Result = first number + second number

If operator == '-' → Result = first number – second number

If operator == '\*' → Result = first number \* second number

If operator == '/' → Check if second number ≠ 0, then Result = first number / second number, else display **"Error: Division by zero"**

If operator == '%' → Check if second number ≠ 0, then Result = first number % second number, else display **"Error: Modulus by zero"**

Else, display **"Invalid operator"**

1. Display the result