Pseudocode Tasks

Q1. Smallest number among 3 given variables.

START

INPUT Number1, Number2, Number3

IF Number1 < Number2 THEN

IF Number1 < Number3 THEN

OUTPUT “Number1 is the smallest”

ELSE

OUTPUT “Number3 is the smallest”

ELSE

IF Number2 < Number3 THEN

OUTPUT “Number2 is the smallest”

ELSE

OUTPUT “Number3 is the smallest”

END

Q2. Subtracting 2 numbers without using ‘-‘.

START

INPUT Num1, Num2

IF Num1 > Num2 THEN

Ans = Num1 + (-Num2)

ELSE

Ans = Num2 + (-Num1)

OUTPUT Ans

END

Q3. Calculating performing multiplication or division.

START

OUTPUT “Enter two numbers: ”

INPUT Number1, Number2

OUTPUT “Enter the operator: ”

INPUT Operator

IF Operator = ‘\*’ THEN

Answer = Number1 \* Number2

ELSE IF Operator = “/” THEN

Answer = Number1 / Number2

ELSE

OUTPUT “Invalid operator”

END

Algorithm Tasks

Q1. Determining if a number is prime:

1. INPUT the Number.
2. Use IF statement to check if Number is divisible by 2.
3. If not, go to step 4. Otherwise, OUTPUT It is not a prime.
4. Check if it is divisible by 3. If not, go to step 5.
5. Is it divisible by 5? If not, step 6.
6. Is it divisible by 7? If not, step 7.
7. OUTPUT that it is a prime number.

Q2. Inputting day number and finding the day of the week.

1. INPUT the DayNumber.
2. Find Remainder by using MOD function on DayNumber.
3. Use nested ifs to match the remainder with the corresponding day; ‘0’ for Sunday, ‘1’ for Monday, and so on.
4. OUTPUT the Day.
5. END

Q3. Finding the GCD of two numbers using the Euclidean algorithm.

1. INPUT Numbers a and b.
2. Set the bigger number as a.
3. Initialize Remainder as 1.
4. Start a loop until the Remainder is 0.
5. MOD a by b and store answer in Remainder.
6. Assign b to a and Remainder to b.
7. Repeat until Remainder is 0.
8. OUTPUT b.