LAB TASKS 2 (PSEOUDOCODES):

1. Write pseudocode to find the smallest number among three given variables. Implement a

decision-making structure to compare the variables. :

ANS: START

INPUT num1

INPUT num2

INPUT num3

IF num1<num2 THEN

IF num3<num1 THEN

OUTPUT num3

ELSE:

OUTPUT num1

ENDIF

ELIF num2<num3 THEN

OUTPUT num2

ENDIF

2. Create pseudocode to subtract two numbers without using the - operator. (Hint: Use addition

and complement techniques.)

ANS: START

INPUT bigno.

INPUT smallno.

SET smallno. TO Binary

SET smallno. TO 2’s complement

SET bingo. TO Binary

Solution= bigno. + smallno.

SET solution TO Denary

OUTPUT solution

3. Develop pseudocode for a basic calculator that performs multiplication and division. The

pseudocode should prompt the user for two numbers and an operator, then display the result

of the operation.

ANS: START

INPUT num1

INPUT num2

INPUT operator

IF operator== ”/” THEN

Value=num1/num2

ELIF operator== “\*” THEN

Value= num1\*num2

ENDIF

OUTPUT value

LAB TASKS 2 (ALGORITHM):

1. Write an algorithm to determine whether a number is a prime number. The algorithm should

iterate through possible divisors and determine if the number has any divisors other than 1

and itself.

ANS: 1. Take number from user that is greater than 1 because less than 2 are prime

2.divide number by 2 and 3

3. if remainder is 0 then its not a prime or else go to step 3

4.loop till number divides by the number before its square root

5.count how many times an integer comes after dividing instead of a floating point

6.output all the divisors where an integer came

7.if there are none then output that it is a prime number

2. Create an algorithm that asks the user for a day number (1-365) and outputs the

corresponding day of the week, assuming that January 1st is a Monday.

ANS: 1. Make user enter the day number

2. set the name of seven days

3. assign number from 0-6 or 1-7 to the name of days in order

4. use MOD to find the remainder of the user day number and divide by 7

5. output the name of the day corresponding to remainder

3. Develop an algorithm for a program that takes two numbers as input and finds the Greatest

Common Divisor (GCD) of the two numbers using the Euclidean algorithm.

ANS: 1. Take an input from user of 2 numbers.

2. make the value of second number to first number

3. then make the value of second number the mod between first and second number

4. Repeat the from step 2 until the value of second the number comes 0

5. output the value of first number as GCD when second number is 0