PF LAB 02 HW GCR.

Date:

Q1 Pseudo code to find smallest number among 3.

=> START

INPUT num 1, num 2, num 3.
SET minimum = num 1
IF (num 1 < num 2) AND (num 1 < num 3).
THEN minimum = num 1
ELSE IF (num 2 < num 1) AND (num 2 < num 3).
THEN minimum = num 2
ELSE IF (num 3 < num 1) AND (num 3 < num 2).
THEN minimum = num 3.

PRINT minimum

END.

Date:

Q2 Create pseudocode to subtract two numbers without using the (-) operator

⇒ START

INPUT num 1, num 2
SET max = 0
SET y = 0
IF (num 1 < num 2)
THEN set max = num 2
set y = num 1 * (-1)
DIFFERENCE = max + y
ELSE set max = num 1
set y = num 2 * (-1)
DIFFERENCE = max + y

PRINT DIFFERENCE

END

Date:

Q3 Develop pseudocode for basic calculator that performs multiplication and division, and display result of desired operation.

=> START

INPUT num1, num2, operator
Set result = 0.
IF operator =  multiplication.
    result = num 1 * num 2
ELSE result = num 1 / num 2

PRINT result.

END.

Date:

Q1 Write algorithm to determine if a number is prime.

=> START
Input number (n).
Set counter = 0
For all values 1 to n STEP 1
Divide n from values 1 to n
IF n is divisible by any numbers between 1 and n
Then print "composite"
Else print "prime"
END.

Q3 Take 2 numbers and develop algorithm to find greatest common divisor using Eudidean algorithm.

=> START
Input num 1 and num 2
IF num 1 > num 2, set num 1 as greater and num 2 as smaller.
ELSE set num 2 as greater and num 1 as smaller.
S1 Divide greater by smaller and find remainder.
S2 { IF remainder = 0, print smaller as GCD.
ELSE set smaller as greater and remainder as smaller
Repeat S1 — S2 until remainder = 0
Print GCD
END.

Date:

Q Create pseudocode that asks user day number and provides day, assuming Jan 1 is Monday.

⇒ START

% = mod

7 % 2 = 7 divid by 2 remain

INPUT day number (1-365).
Set Remainder = 0
Remainder = day number % 7

IF Remainder = 0
  THEN PRINT "Sunday"
ELSE IF Remainder = 1
  THEN PRINT "Monday"
ELSE IF Remainder = 2
  THEN PRINT "Tuesday"
ELSE IF Remainder = 3
  THEN PRINT "Wednesday"
ELSE IF Remainder = 4
  THEN PRINT "Thursday"
ELSE IF Remainder = 5
  THEN PRINT "Friday"
ELSE IF Remainder = 6
  THEN PRINT "Saturday"

END.