

# Pseudocode

Date: 

M	T	W	T	F	S	S
---	---	---	---	---	---	---

Q:1 ✓

1. Start
2. Input: variables ( $x, y, z$ )
3. Process:  
    If  $x < y$  and  $x < z$   
    then  $\text{Smallest} = x$
4. Else if  $y < x$  and  $y < z$   
    then  $\text{Smallest} = y$
5. Else if  $z < x$  and  $z < y$   
    then  $\text{Smallest} = z$
6. output: Smallest number
7. End.

Q:2 ✗

1. Start
2. Input: (Num1, Num2)
3. output: (Num1, Num2) Subtraction Perform
4. Find Two's complement of Num2 (Num2 in Binary).  $[\text{complement of Num2} = \text{Num2} + 1]$
5. Add Num1 (binary) and complement of Num2  
    difference or  $[\text{Subtract} = \text{Num1} + \text{Num2}^{\text{complement}}]$
6. convert result "Binary to decimal".
7. End.



# Pseudocode

Date: 

M	T	W	T	F	S	S
---	---	---	---	---	---	---

Q: 3 ✓

1. Start

2. "Input: two numbers ~~Num1, Num2~~ (Num1, Num2)"

3. "output: result of operation of the basic calculator."

4. Input: Num1, Num2, operator

5. Processing:

If the operator is "\*" then

Perform "multiplication"

result = (Num1 × Num2) or  
(Num1 \* Num2)

output: result of "multiplication"

6. Else if If operator is "÷" or "/"  
if the Num2 is zero' then

output: Error (division by zero is not allow)

Else Perform "division"

result = (Num1 ÷ Num2) or (Num1 / Num2)

output: "result of division"

7. End. If the operator is invalid then

output: Error

End.

## Algorithms ✓

1. ASK user to enter an Integer 'n'

2. output: 'n' is a Prime number

3. If  $n \leq 1$  Then "False"

Numbers less than or equal to 1 are not Prime.

4. The case for 2, 3

If  $n = 2$  or  $n = 3$  Then

"TRUE" 2 and 3 are Prime.

5. If even numbers greater than

2. "If  $n \% 2 = 0$  Then

"False" ~~By~~ even numbers greater than 2 are not Prime.

6. If number greater than 3

If  $n \% 3 = 0$  Then

False 'n' is not Prime

7. End.



Q:2 ✓

Date:

M	T	W	T	F	S	S
---	---	---	---	---	---	---

1) Ask user for a day (1-365)

2) calculate  $\text{day} = (1-365) \% 7$

~~3 output day~~

3. If  $\text{day} == 1$   $\xrightarrow{\text{Print}}$  Monday

4. If  $\text{day} == 2$   $\xrightarrow{\text{Print}}$  Tuesday

5. If  $\text{day} == 3$   $\xrightarrow{\text{Print}}$  Wednesday

6. If  $\text{day} == 4$   $\xrightarrow{\text{Print}}$  Thursday

7. If  $\text{day} == 5$   $\xrightarrow{\text{Print}}$  Friday

8. If  $\text{day} == 6$   $\xrightarrow{\text{Print}}$  Saturday

9. If  $\text{day} == 0$   $\xrightarrow{\text{Print}}$  Sunday

10. output: "day of week"

11. End.

## Algorithm

Q: 3.

1. Start
2. Read two numbers  $n_1$  and  $n_2$   
Perform their division or %
3. Save the answer in variable
4. Then, Perform % operation on the  
Saved answer and Previous  
operation's divisor.
5. Keep updating the variable after  
every iteration Performed.
6. Then repeat the steps till your  
remainder obtained by %  
becomes equal to zero.
7. The newest iteration's non-zero  
remainder will be your  
Greatest common divisor.
8. End.