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.

1:Start

2:input number

3:set count=1

3:set divisor=2

4:Divide the number by divisor

5:If the remainder is 0 add 1 to count variable

6:Add 1 to the divisor

7:Go to step 4 till divisor is equal to number

8:If count is equal to 2

9:It is a prime number

10:End

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.

1:Read a day number between(1-365)

2:Divide the number by 7

3:If remainder is 0 then day is Sunday

4:If remainder is 1 then day is Monday

5:If remainder is 2 then day is Tuesday

6:If remainder is 3 then day is Wednesday

7:If remainder is 4 then day is Thursday

8:If remainder is 5 then day is Friday

9:If remainder is 6 then day is Saturday

10:Stop

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.

1:Start

2:Ask two numbers from users

3:Take bigger number as A and smaller number as B

4:Divide A by B

5:After dividing assign the value of B to A and remainder to B

6:Go to step 4 untill B becomes 0

7:The value of A is greatest common divisor

8:End