Online 1 Set B

Q1. Write a recursive program to find the GCD of x and y where x, y are positive integers using the following technique. Write a main function to take the input from the user.

Sample Input	Sample Output
48 18	6

For example, to compute gcd(48,18), the computation is as follows:

$$gcd(48, 18) \quad \rightarrow \quad gcd(18, 48 \bmod 18) = gcd(18, 12)$$
$$\rightarrow \quad gcd(12, 18 \bmod 12) = gcd(12, 6)$$
$$\rightarrow \quad gcd(6, 12 \bmod 6) = gcd(6, 0).$$

This again gives gcd(48, 18) = 6.

Q2. Let, a number that is divisible by 11 is called a good number. Write a divide and conquer function to **print** the good numbers and calculate the **sum** of good numbers in an array of n integers. Write a main function to take the input from the user.

Sample Input	Sample Output
5 11 0 1 5 22	33